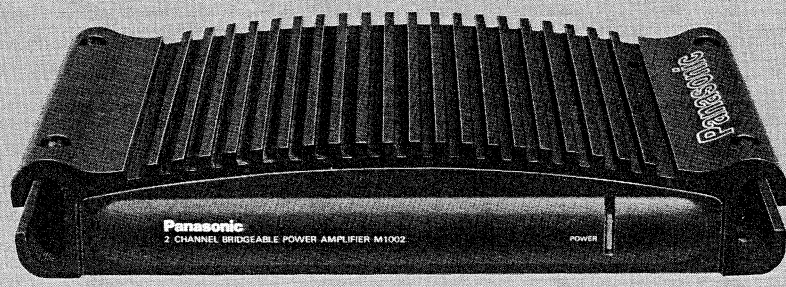
ORDER NO. APD9012977

Service Manual

AUTO PRODUCTS

CY-M652EN
CY-M1002EN

2 Channel Bridgeable Power Amplifier



SPECIFICATIONS※

Power Supply	: DC 12V (11-16V) Test Voltage 14.4V Negative Ground	
Current Consumption	: CYM652EN; 11A (at 40W×2) CY-M1002EN; 17A (at 60W×2)	
Speaker Inpedance	: 4 ohms	
Power Output	: CY-M652EN	STEREO, 40W+40W (1,000Hz, 0.1%, 4 ohms) MONO, 120W (1,000Hz, 0.1%, 4 ohms)
	CY-M1002EN	STEREO, 60W+60W (1,000Hz, 0.1%, 4 ohms) MONO, 160W (1,000Hz, 0.1%, 4 ohms)
Maximum Power Output	: CY-M652EN	STEREO, 65W+65W MONO, 130W
	CY-M1002EN	STEREO, 100W+100W MONO, 200W
Total Harmonic Distortion	: CY-M652EN	0.003% (1,000Hz, at 20W)
	CY-M1002EN	0.003% (1,000Hz, at 40W)
Signal to Noise Ratio	: CY-M652EN	100dB (IHF, A)
	CY-M1002EN	102dB (IHF, A)
Frequency Response	: 5Hz-100,000Hz	
Damping Factor	: 60 (4 ohms)	
Input Sensitivity	: 200mV	
Input Impedance	: More than 10 kohms	
Dimensions(W×H×D)	: CY-M652EN	250(W)×50(H)×150(D)mm
	CY-M1002EN	300(W)×57(H)×160(D)mm
Weight	: CY-M652EN	1.9Kg.
	CY-M1002EN	2.6Kg.

Note: ※Specification and the design are subject to possible modification without notice due to improvements.

TECHNISCHE DATEN

Spannungsversorgung	: 12V (11V-16V) Gleichspannung, Testspannung 14.4V, negative Erdung	
Leistungsaufnahme	: CY-M652EN; 11A (bei 40W×2) CY-M1002EN; 17A (bei 60W×2)	
Lautsprecherimpedanz	: 4 Ω	
Ausgang	: CY-M652EN	STEREO, 40W+40W (1,000Hz, 0.1%, 4 Ω) MONO, 120W (1,000Hz, 0.1%, 4 Ω)
	CY-M1002EN	STEREO, 60W+60W (1,000Hz, 0.1%, 4 Ω) MONO, 160W (1,000Hz, 0.1%, 4 Ω)
Höchstausgangsleieistung	: CY-M652EN	STEREO, 65W+65W MONO, 130W
	CY-M1002EN	STEREO, 100W+100W MONO, 200W
Gesamtklirrfaktor	: CY-M652EN	0.003% (1,000Hz, bei 20W)
	CY-M1002EN	0.003% (1,000Hz, bei 40W)
Signal/Rauschabstand	: CY-M652EN	100dB (IHF, A)
	CY-M1002EN	102dB (IHF, A)
Frequenzgang	: 5Hz-100,000Hz	
Dämpfungsfaktor	: 60 (4 Ω)	
Eingangsempfindlichkeit	: 200mV	
Eingangsimpedanz	: über 10 kΩ	
Abmessungen	: CY-M652EN	250(B)×50(H)×150mm(T)
	CY-M1002EN	300(B)×57(H)×160mm(T)
Gewicht	: CY-M652EN	1.9kg
	CY-M1002EN	2.6kg

Hinweis: Bei Konstruktion und technischen Daten Änderungen vorbehalten

Panasonic

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Fuse

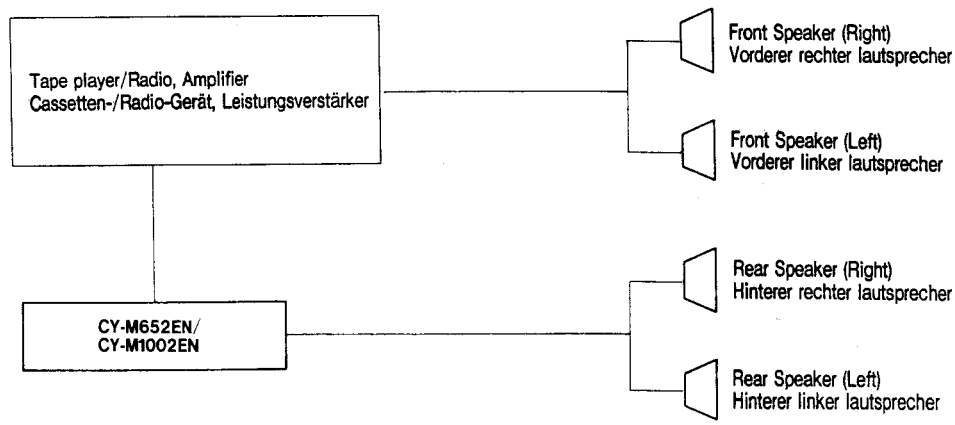
Be sure to use a fuse of the specified rating (3A, 25A, 30A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

Sicherung

Als Ersatz für eine durchgebrannte Sicherung unbedingt eine Sicherung mit dem vorgeschriebenen Nennwert (3A, 25A, 30A) verwenden. Durch den Gebrauch von Sicherungen mit höheren Nennwerten, von Sicherungsersatzteilen oder durch den Anschluß ohne Gebrauch einer Sicherung kann ein Brand oder Geräteschaden verursacht werden. Falls die Austauschsicherung ebenfalls durchbrennt,

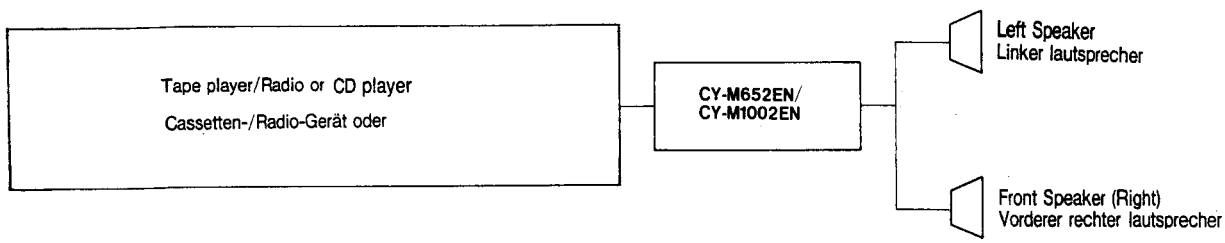
System Diagram／Systemschema

Standard Example:
Standard-Beispiel:

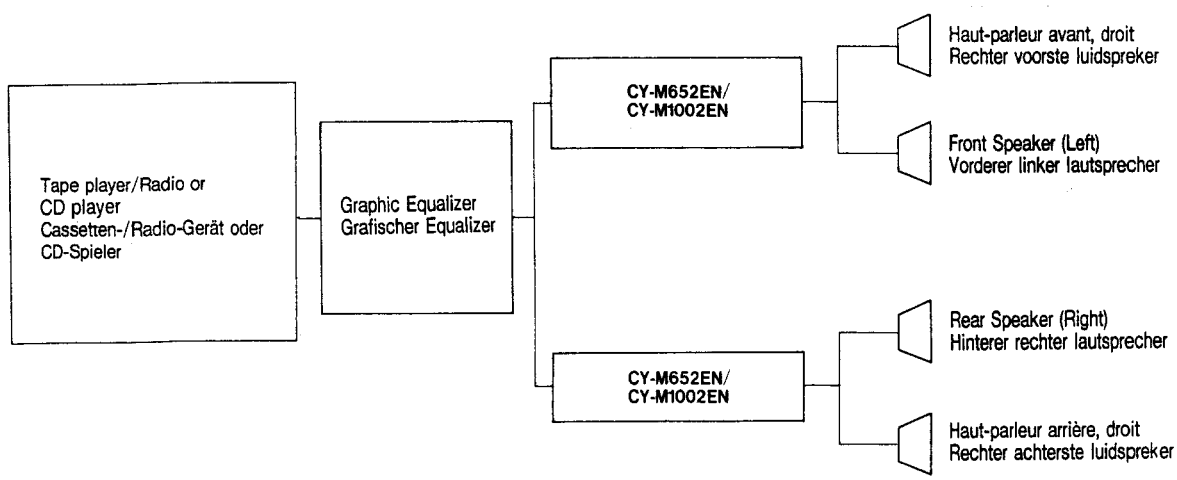


(1)

Other Examples:
Weitere Beispiele:



(2)



Installation

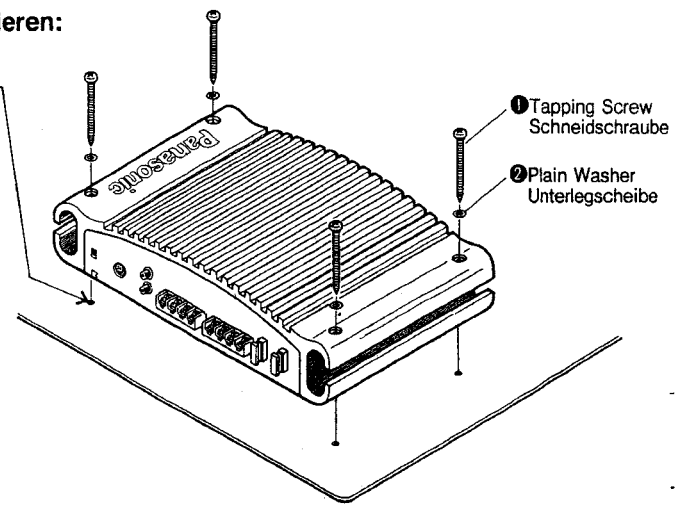
- This equipment, if possible, should be installed by a professional installer.
- The speakers to be used with the amplifier should be able to handle more than 130W for CY-M652EN and more than 200W for CY-M1002EN. Use of speakers with small input ratings can result in damage to the speakers.
- Since the 2-Channel Bridgeable Power Amplifier has a very large output, the unit should be installed in the trunk of car.
  - The speaker cords and the power amplifier unit shoud be kept away from the antenna and antenna extension cord.
  - In case of using the RCA cords, they should be kept away from the speaker cords.

Einbau

- Diese Ausrüstung sollte von einem Fachmann eingebaut werden.
- Die mit diesem Verstärker zu verwendenden Lautsprecher sollen beim Modell CY-M652EN eine Belastbarkeit von mindestens 130 W und beim Modell CY-M1002EN eine Leistung von mindestens 200 W haben. Lautsprecher mit zu geringer Belastbarkeit können beschädigt werden.
- Da dieser Leistungsverstärker über eine sehr hohe Ausgangsleistung verfügt, sollte er im Kofferraum des wagens installiert werden.
  - Lautsprecherkabel und Leistungsverstärker sind von Antenne und Antennenverlängerungskabel entfernt zu halten.
  - Bei Gebrauch von RCA-Kabeln diese von den Lautsprecherkabeln entfernt halten.

Installing the unit on a metallic portion of the car:
Das Gerät an einem Metallteil des Wagens installieren:

Drill four holes
Two holes for CY-M652EN
Four holes for CY-M1002EN
Metallic portion (floor)
Vier Löcher bohren.
Zwei Löcher für CY-M652EN
Vier Löcher für CY-M1002EN
Metallteil (Boden)



- For CY-M652EN, there are two installation holes.
- For CY-M1002EN, there are four installation holes.

- All illustrations show CY-M1002EN.
- In allen Abbildungen ist das Modell CY-M1002EN gezeigt.

Supplied Hardwares

[CY-M652EN]

No.	Description	Q'ty.
❶	Tapping Screw (5mmϕ x 60 mm)	2
❷	Plain Washer (5mmϕ)	2

[CY-M1002EN]

No.	Description	Q'ty.
❶	Tapping Screw (5mmϕ x 65 mm)	4
❷	Plain Washer (5mmϕ)	4

Mitgelieferte Befestigungsteile

[CY-M652EN]

Nr.	Bezeichnung	Anzahl
❶	Schneidschraube (5mmϕ x 60 mm)	2
❷	Unterlegscheibe (5mmϕ)	2

[CY-M1002EN]

Nr.	Bezeichnung	Anzahl
❶	Schneidschraube (5mmϕ x 65 mm)	4
❷	Unterlegscheibe (5mmϕ)	4

Electrical Connection

Before wiring:

- This unit is to be used only in a 12-Volt, DC battery system (Car) with negative ground.
- Disconnect the cable from the negative (−) battery terminal (see note below).

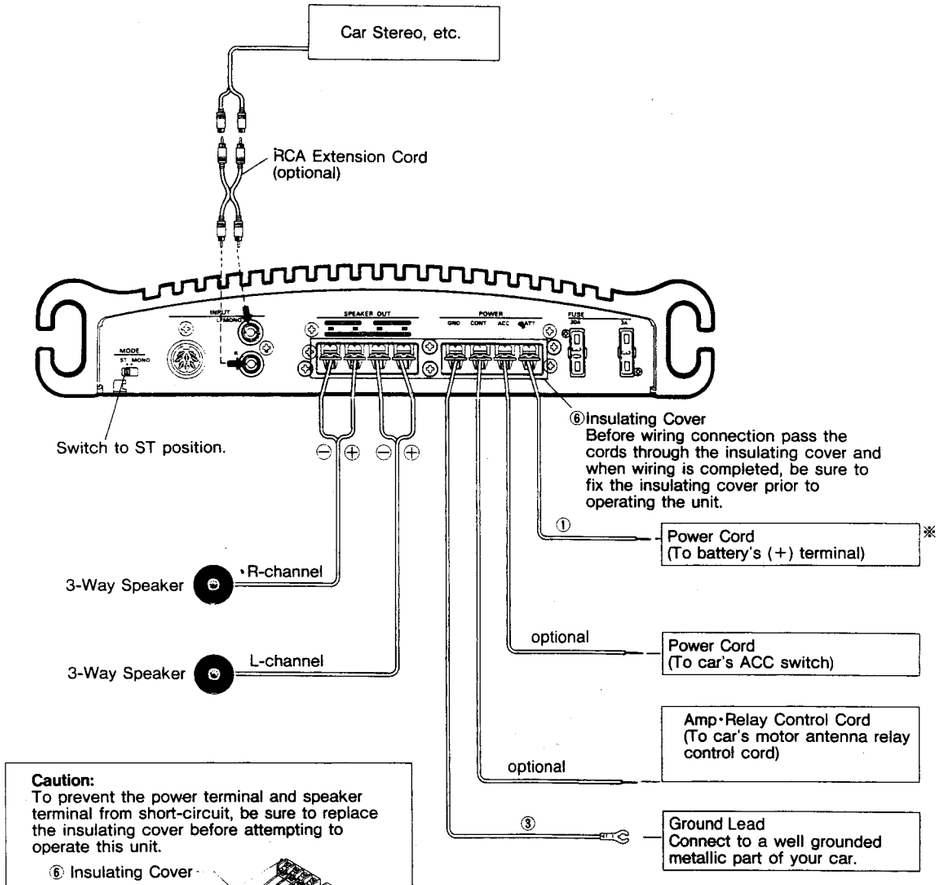
Note:

For installation in cars with trip or navigational computers, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. For this type of car, battery should not be disconnected. Therefore, extra care should be taken to prevent short circuiting.

- Please carefully read the operating and installation instructions of the respective equipment before connecting if to this unit.

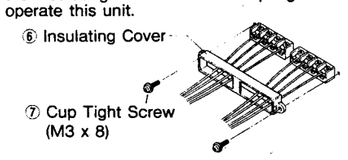
Speaker Connection I

For Stereo Amp System:


Car Stereo, etc.
RCA Extension Cord (optional)
Switch to ST position.
⑥Insulating Cover
Before wiring connection pass the cords through the insulating cover and when wiring is completed, be sure to fix the insulating cover prior to operating the unit.
①
Power Cord (To battery's (+) terminal)
※
3-Way Speaker
R-channel
3-Way Speaker
L-channel
optional
Power Cord (To car's ACC switch)
Amp·Relay Control Cord (To car's motor antenna relay control cord)
optional
③
Ground Lead Connect to a well grounded metallic part of your car.

Caution:

To prevent the power terminal and speaker terminal from short-circuit, be sure to replace the insulating cover before attempting to operate this unit.



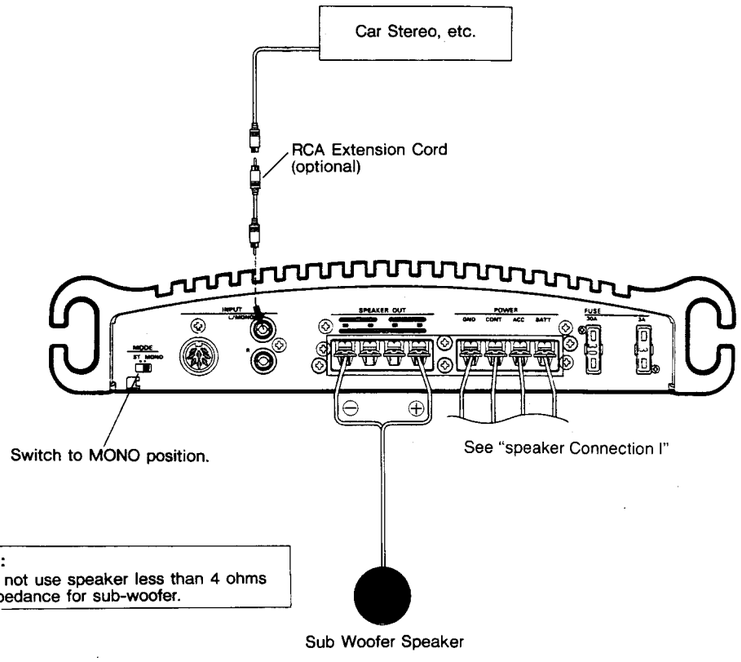
Wiring Kit

No.	Description	Q'ty.
①	Power Cord (BATT) (Yellow)	1
②	Power Extension Cord (5m) (Fuse 30A) (CY-M1002EN) (Yellow) (2m) (Fuse 20A) (CY-M652EN)	1
③	Ground Lead (Black)	1
④	Spring Connector (Yellow)	1

No.	Description	Q'ty.
⑤	Grommet for Power Cord	1
⑥	Insulating Cover	1
⑦	Cup Tight Screw (M3 × 8)	2

Speaker Connection II

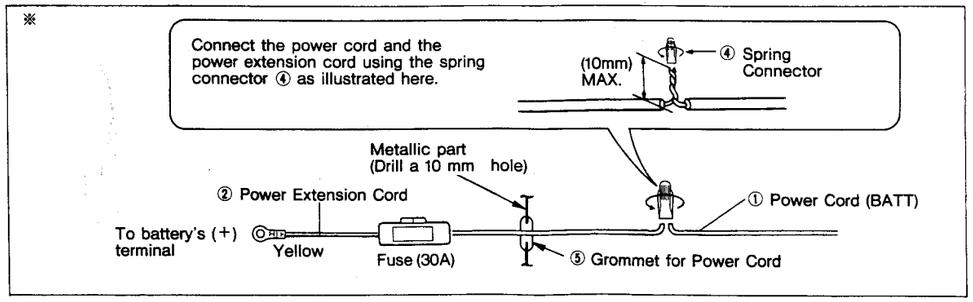
For Monaural Amp System:



Note:

- Do not use speaker less than 4 ohms impedance for sub-woofer.

※


Connect the power cord and the power extension cord using the spring connector ④ as illustrated here.
(10mm) MAX.
④ Spring Connector
Metallic part (Drill a 10 mm hole)
② Power Extension Cord
① Power Cord (BATT)
To battery's (+) terminal
Yellow
Fuse (30A)
⑤ Grommet for Power Cord

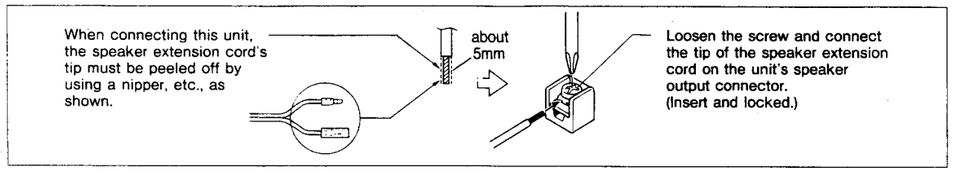
Panas 50G4

Operation Procedures

For your driving safety, keep the volume level low enough to be aware of road and traffic conditions.

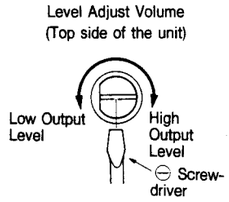
Precautions:

- This unit is designed for used with a Panasonic tape player/radio model.
- This unit is automatically switched on and off if the power switch of the tape player/radio is turned on and off. The power indicator lights up when the tape player/radio is turned on.
- Due to its large output, the current consumption of the unit is also large; therefore, the unit should not be used with the engine stopped. Otherwise, the battery may deteriorate so that starting of the engine may become impossible.
- When using this unit, the speaker extension cord (supplied with the speaker) must be worked out as shown in the illustration below;


When connecting this unit, the speaker extension cord's tip must be peeled off by using a nipper, etc., as shown.
about 5mm
Loosen the screw and connect the tip of the speaker extension cord on the unit's speaker output connector. (Insert and locked.)

■ Level Adjustment:

In some instances, the acoustical output from each speaker may not be balanced properly depending upon the type of speakers or tape player/radio unit to be used. If this occurs, try to adjust the volume level by turning the level adjust volume to the left or right until the output from each amplifier is balanced by using a flat-head screwdriver as shown in the illustration. The effects are described in the table below.
At first, the level is set at −3dB against the maximum level.

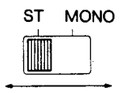


■ Mode Selection:

This mode selector switch has two positions and they are explained as follows: For speaker connection, refer to illustrations below.

Mode \ Model	CY-M652EN's output	CY-M1002EN's output
MONO	130W	200W
ST	65W x 2	100W x 2

Mode Selector Switch



Caution: The mode selector switch and speaker cord's connection must be operated only when the power to the unit is switched off.

Elektrischer Anschluß

Vorsichtsmaaregeln für die Installation:

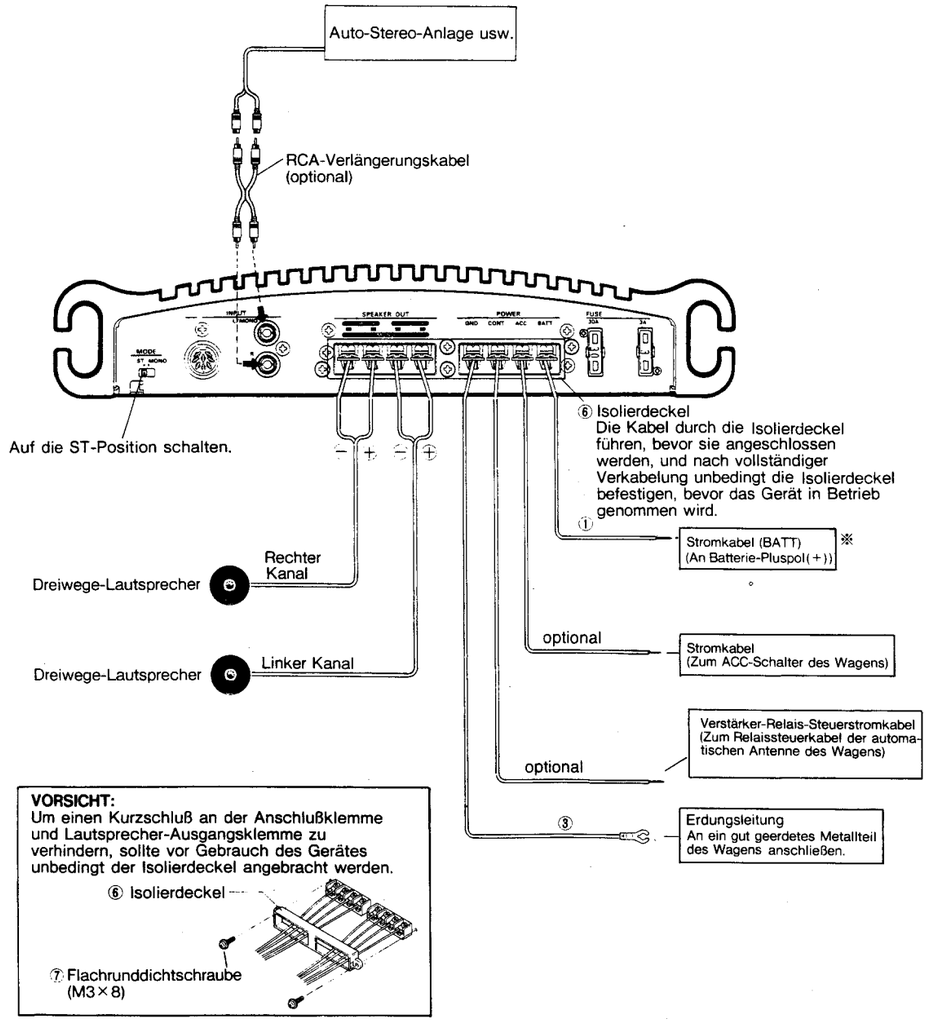
- Dieses System kann nur in Verbindung mit einer 12-Volt-Gleichstrom-Batterieanlage (Auto) mit negativer Erdung verwendet werden.
- Vor dem Einbauen und Verkabeln das Massekabel (−) von der Batterie abklemmen.

Hinweis:
Bei mit Navigations- oder anderen Computern ausgestatteten Fahrzeugen können Computer-Speicherinhalte verlorengehen, wenn die Batterie abgeklemmt wird. Bei derartig ausgestatteten Fahrzeugen sollte die Batterie nicht abgetrennt werden. In diesem Fall ist insbesondere darauf zu achten, daa kein Kurzschlua verursacht wird.

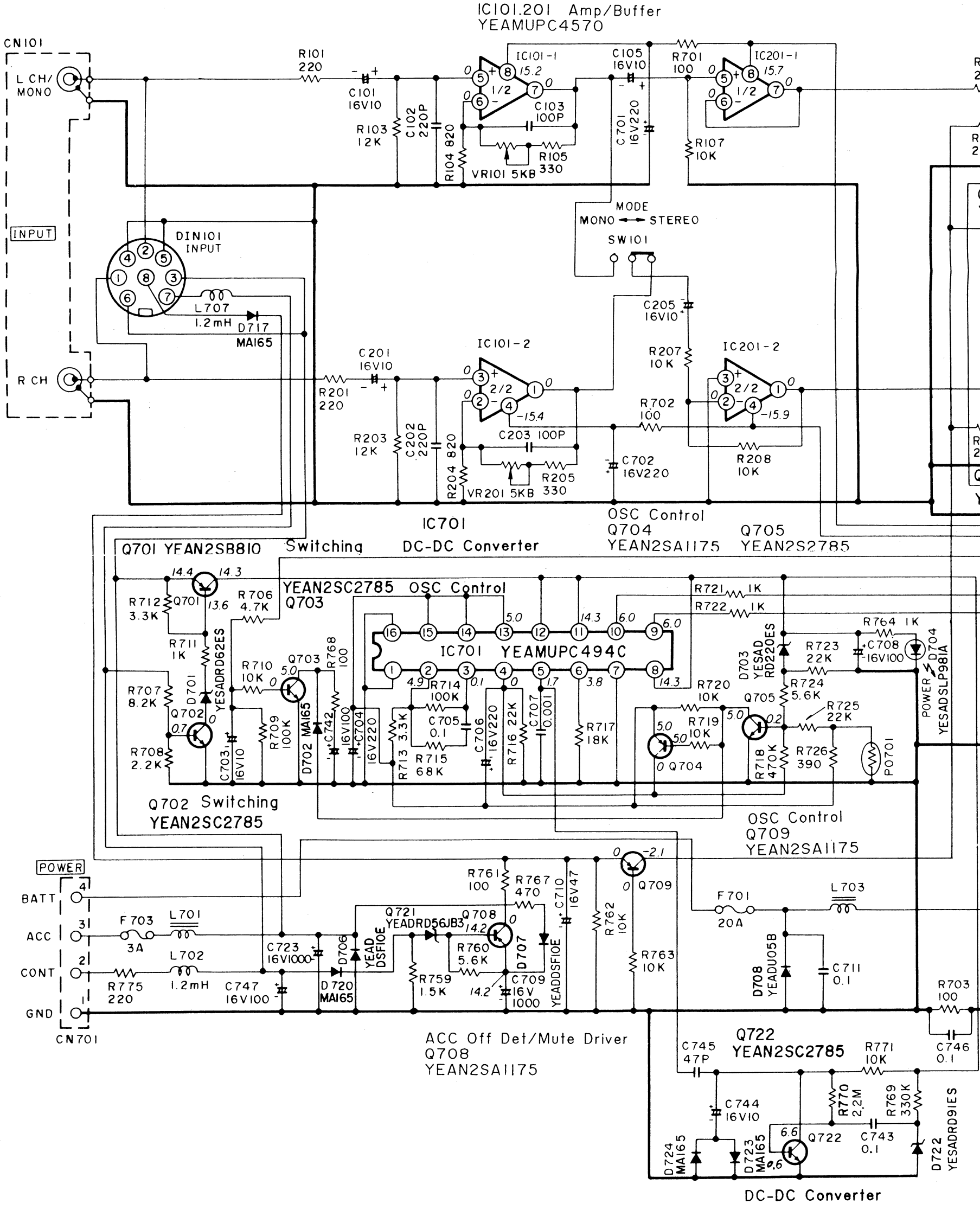
- Bei der Verkabelung genau gemäß der Bedienungsanleitung des jeweiligen Geräts vorgehen.

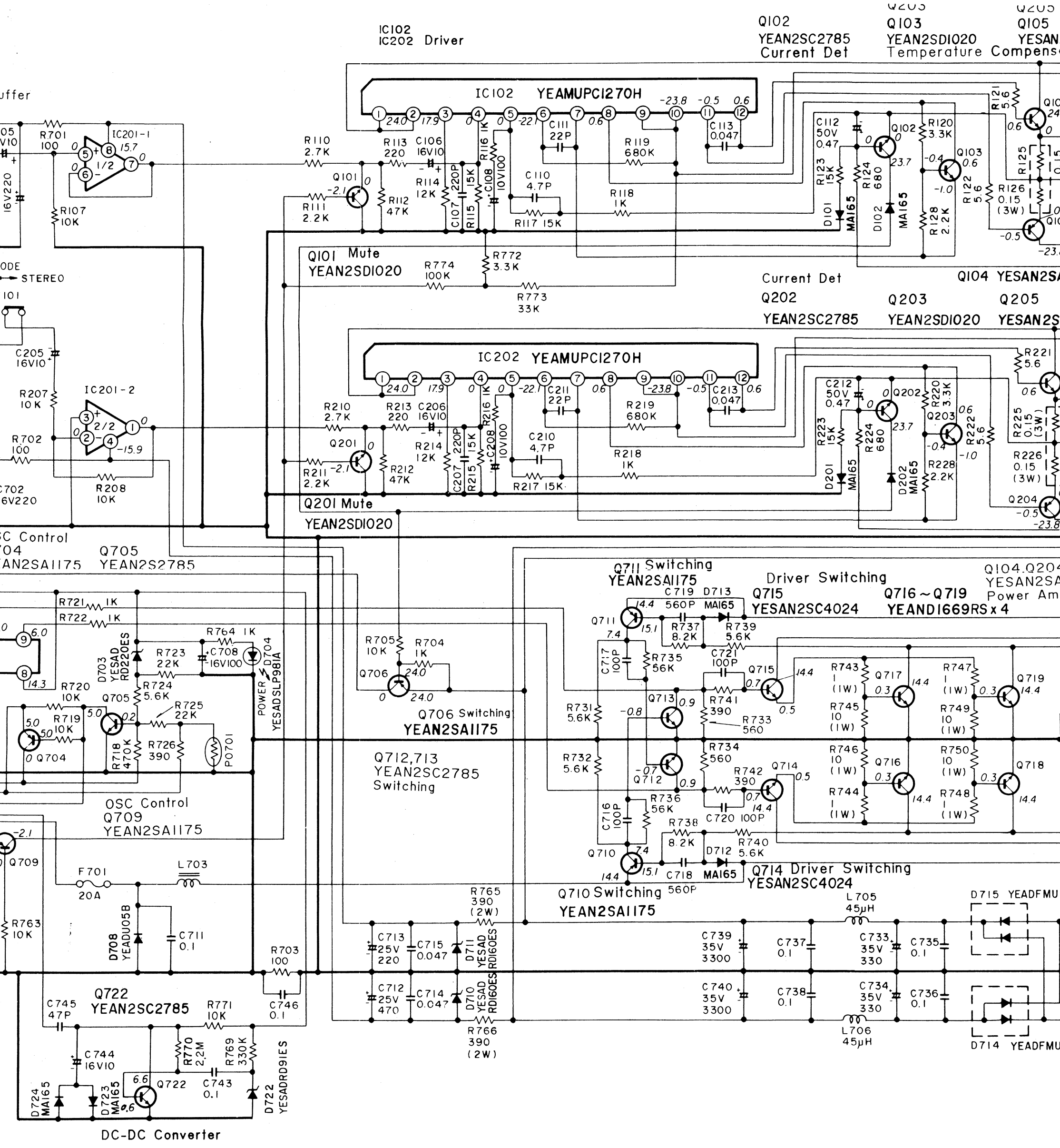
Lautsprecheranschluß I

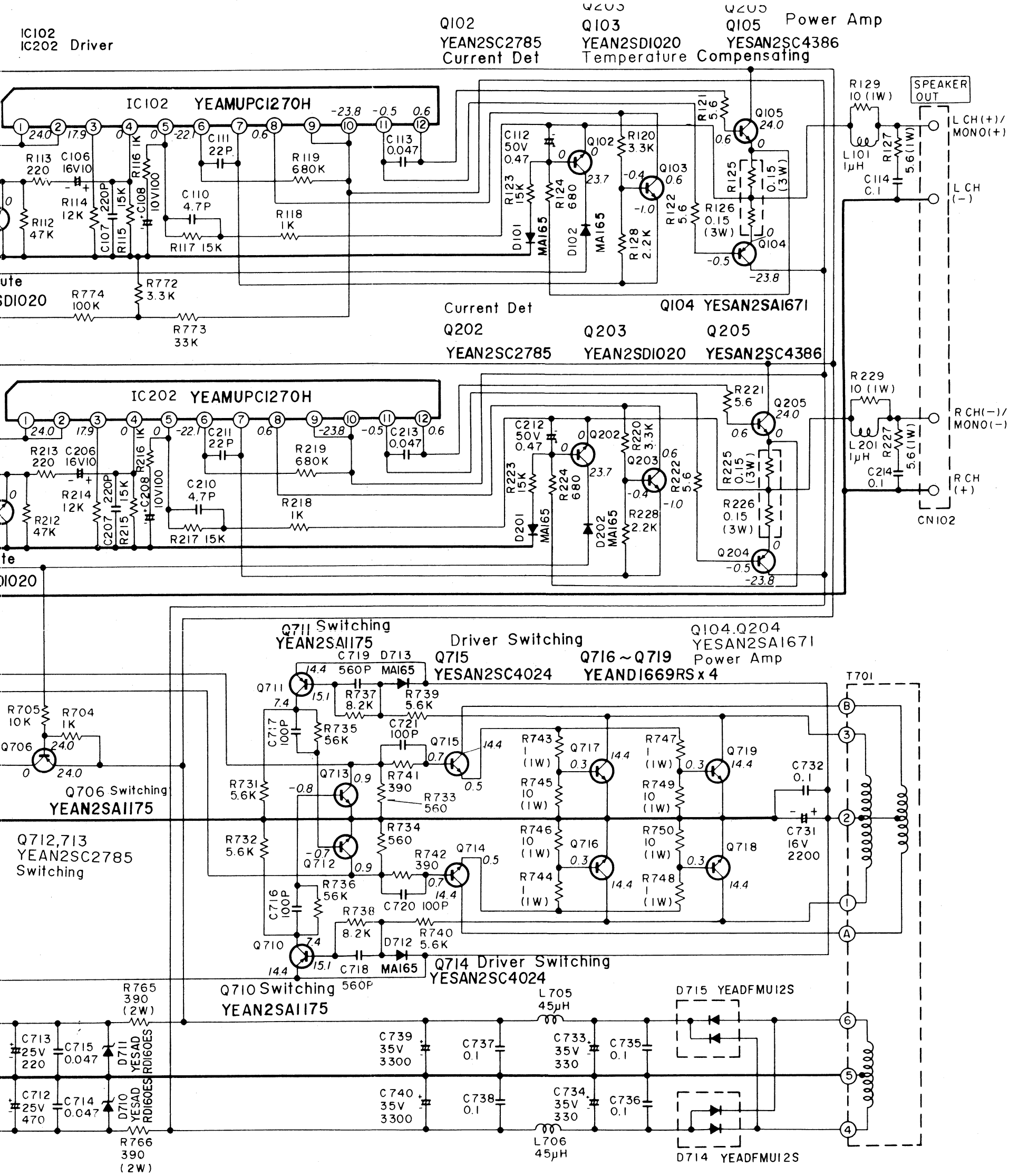
Für Stereo-Verstärker-System:



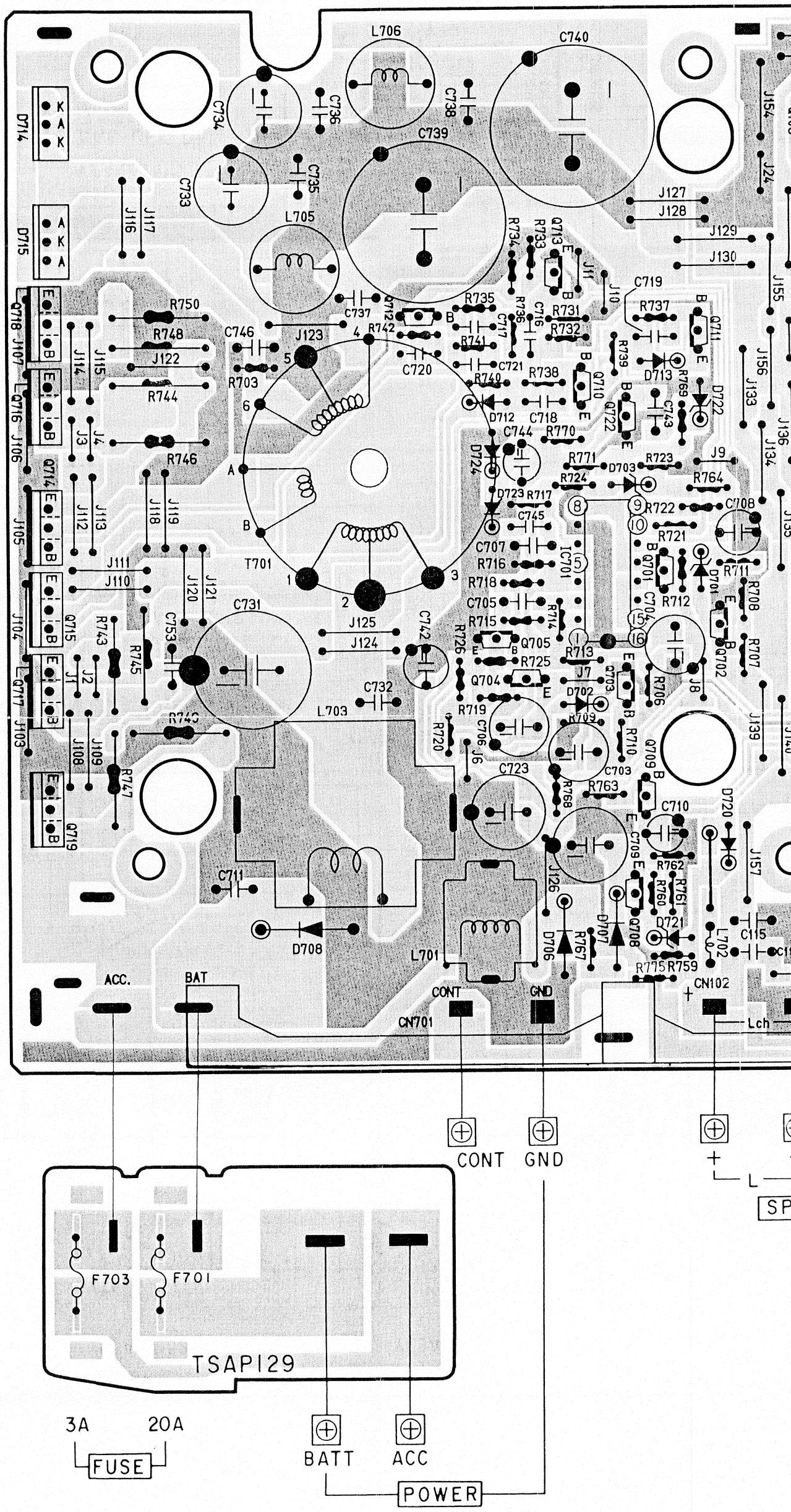
VORSICHT:
Um einen Kurzschluß an der Anschlußklemme und Lautsprecher-Ausgangsklemme zu verhindern, sollte vor Gebrauch des Gerätes unbedingt der Isolierdeckel angebracht werden.


IC101.201 Amp/Buffer
YEAMUPC4570
CN101
L CH/MONO
R CH
INPUT
DIN101 INPUT
L707 1.2mH
D717 MA165
R101 220
C101 16V10
R103 12K
C102 220P
R104 820
IC101-1
1/2
C103 100P
R105 330
VR101 5KB
C105 16V10
R701 100
IC201-1
R107 10K
C701 16V220
MODE
MONO ↔ STEREO
SW101
C205 16V10
C201 16V10
R201 220
IC101-2
2/2
R203 12K
C202 220P
R204 820
C203 100P
R205 330
VR201 5KB
R207 10K
R702 100
R208 10K
C702 16V220
IC701
DC-DC Converter
OSC Control
Q704
YEAN2SA1175
Q705
YEAN2S2785
Q701 YEAN2SB810
Switching
YEAN2SC2785 OSC Control
Q703
IC701 YEAMUPC494C
R712 3.3K
Q701
R706 4.7K
R711 1K
R710 10K
Q703
R768 100
R707 8.2K
D701 YESADR062ES
Q702
R708 2.2K
C703 16V10
R709 100K
D702 MA165
C742 16V100
C704 16V220
R713 3.3K
R714 100K
C705 0.1
R715 68K
C706 16V220
R716 22K
C707 0.001
R717 18K
R721 1K
R722 1K
R720 10K
R719 10K
Q704
D703 YESAD RD220ES
R723 22K
R724 5.6K
Q705
R725 22K
R718 470K
R726 390
P0701
R764 1K
C708 16V100
POWER
D704 YESADSLP981A
Q702 Switching
YEAN2SC2785
OSC Control
Q709
YEAN2SA1175
POWER
BATT
ACC
CONT
GND
CN701
F703 3A
L701
L702
R775 220
1.2mH
C747 16V100
D720 MA165
C723 16V1000
D706 YEAD DSF10E
Q721 YEADRD56JB3
R759 1.5K
R760 5.6K
Q708
D707 YEADDSF10E
R761 100
R767 470
C710 16V47
R762 10K
Q709
R763 10K
F701 20A
L703
D708 YEADU05B
C711 0.1
R703 100
C746 0.1
ACC Off Det/Mute Driver
Q708
YEAN2SA1175
Q722
YEAN2SC2785
C745 47P
R771 10K
C744 16V10
R770 2.2M
R769 330K
D724 MA165
D723 MA165
Q722
C743 0.1
D722 YESADR091ES
DC-DC Converter


IC102
IC202 Driver
IC102 YEAMUPC1270H
Q102
YEAN2SC2785
Current Det
Q103
YEAN2SD1020
Temperature Compens
Q105
YESAN
Q101 Mute
YEAN2SD1020
Q201 Mute
YEAN2SD1020
IC202 YEAMUPC1270H
Current Det
Q202
YEAN2SC2785
Q203
YEAN2SD1020
Q205
YESAN2S
Q104 YESAN2SA
Q711 Switching
YEAN2SA1175
Driver Switching
Q715
YESAN2SC4024
Q716~Q719
YEAND1669RS x 4
Q104.Q204
YESAN2SA
Power Am
Q706 Switching
YEAN2SA1175
Q712,713
YEAN2SC2785
Switching
Q710 Switching
YEAN2SA1175
Q714 Driver Switching
YESAN2SC4024
OSC Control
Q709
YEAN2SA1175
Q705
YEAN2S2785
Q722
YEAN2SC2785
DC-DC Converter
D715 YEADFMU
D714 YEADFMU



2 Channel Bridgeable Power Amplifier / 2-Kanal-Brückenleistungsverstärker


L706
C740
C734
C736
C738
C739
D714
K A K
C735
C733
J116
J117
L705
D715
A K A K
R734
R733
Q713
J11
J10
C719
R735
R736
C737
Q712
R731
R732
R737
Q711
R750
R748
J122
R744
C746
J123
R742
C720
R741
C721
R740
R738
Q710
Q722
D713
R769
D722
C743
J107
J106
J105
J104
J103
Q718
Q716
Q714
Q715
Q717
Q719
J114
J115
J4
J3
R746
J112
J113
J118
J119
J111
J110
J121
J120
R743
R745
C753
C731
T701
J125
J124
C742
R726
Q705
R725
Q704
R714
R713
J7
Q703
D702
R709
R719
C706
R720
J6
C732
L703
C723
R768
R763
C703
R710
Q709
C710
C709
R762
R761
R760
D720
J157
J126
D707
Q708
D721
R775
R759
L702
C115
D708
L701
D706
R767
ACC.
BAT
CONT
GND
CN701
CN102
Lch
J154
J24
J127
J128
J129
J130
J155
J156
J133
J136
J134
J135
J9
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R722
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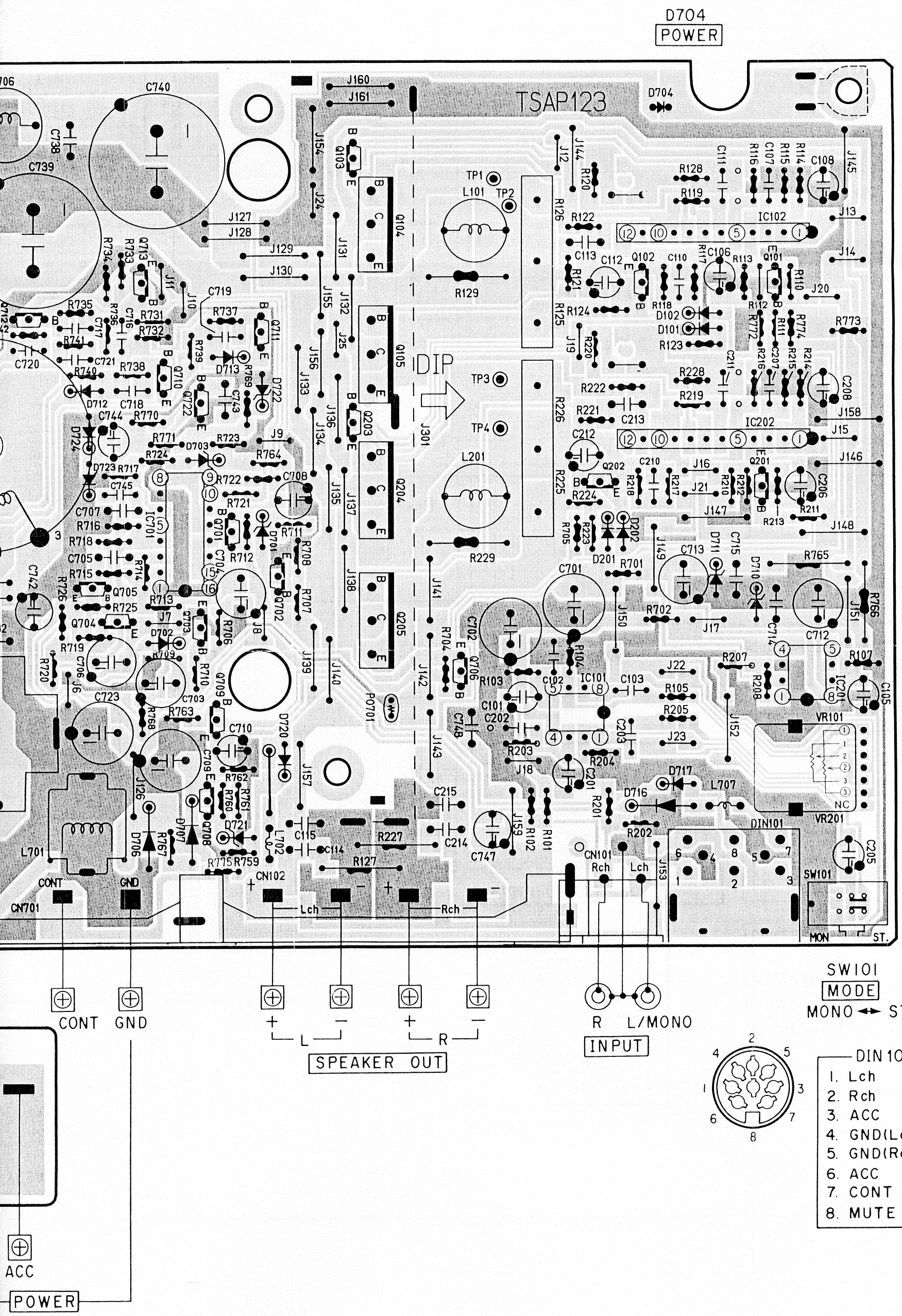
R771
D703
R717
C745
C707
R716
R718
C705
R715
C744
R770
D712
D724
D723
C718
R712
C704
R711
R708
R707
J8
J139
J140
Q702
Q701
D701
IC701
F703
F701
TSAP129
3A
20A
FUSE
BATT
ACC
POWER
CONT
GND
+
L
SP



VR101, 201
VOLUME

D704
POWER

TSAP123

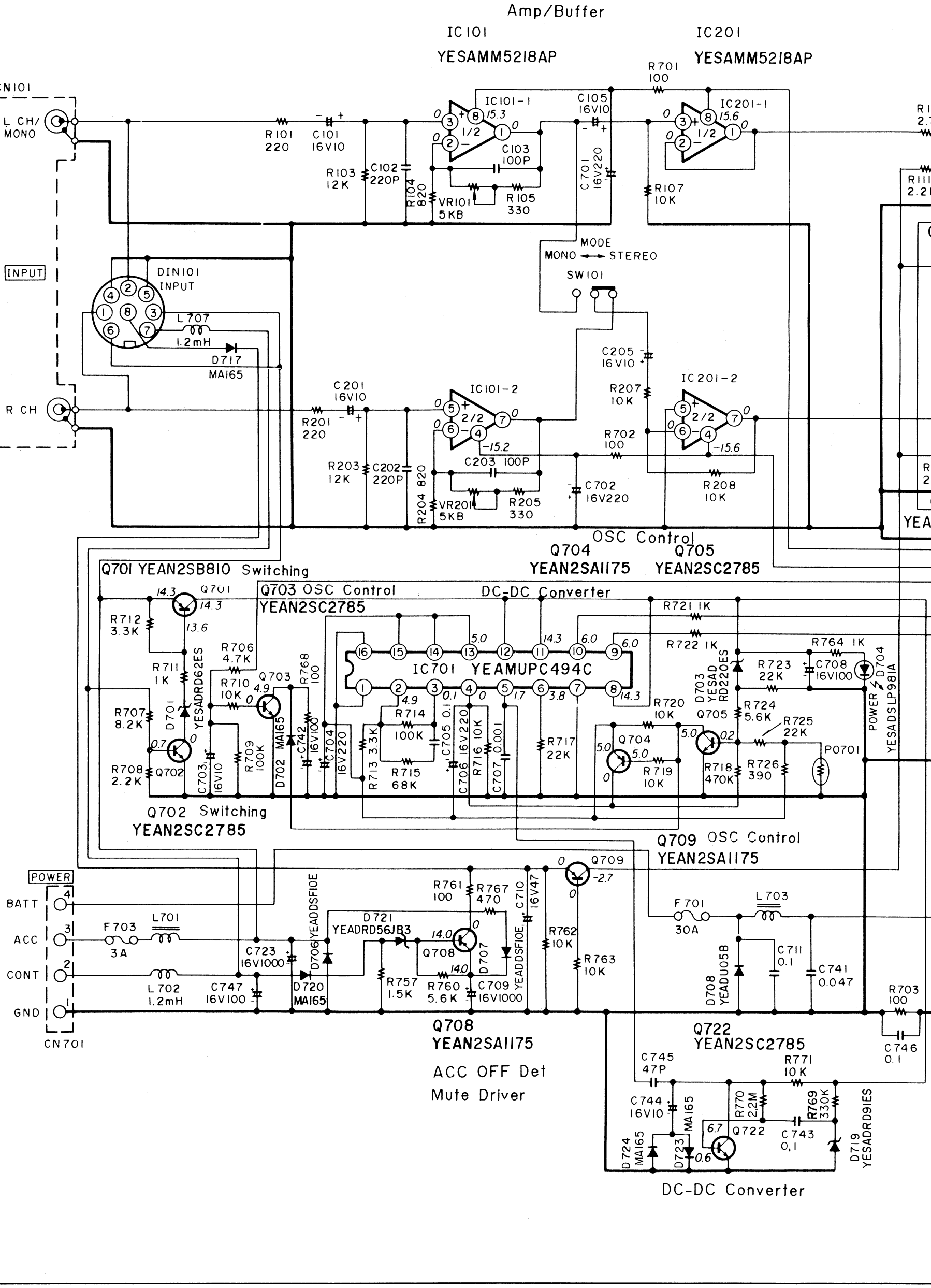
VR101,201
VOLUME

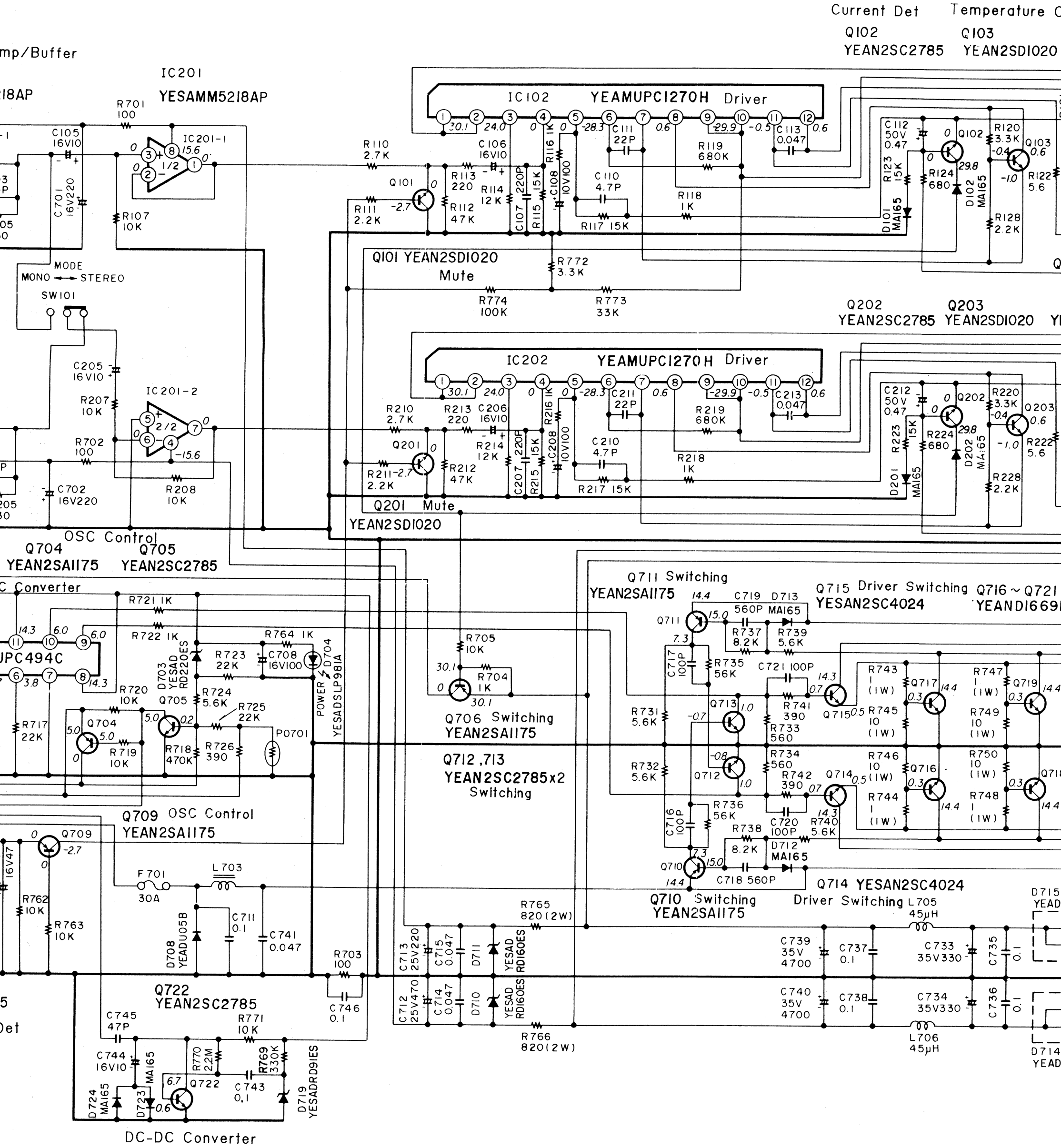
SW101
MODE
MONO ↔ ST

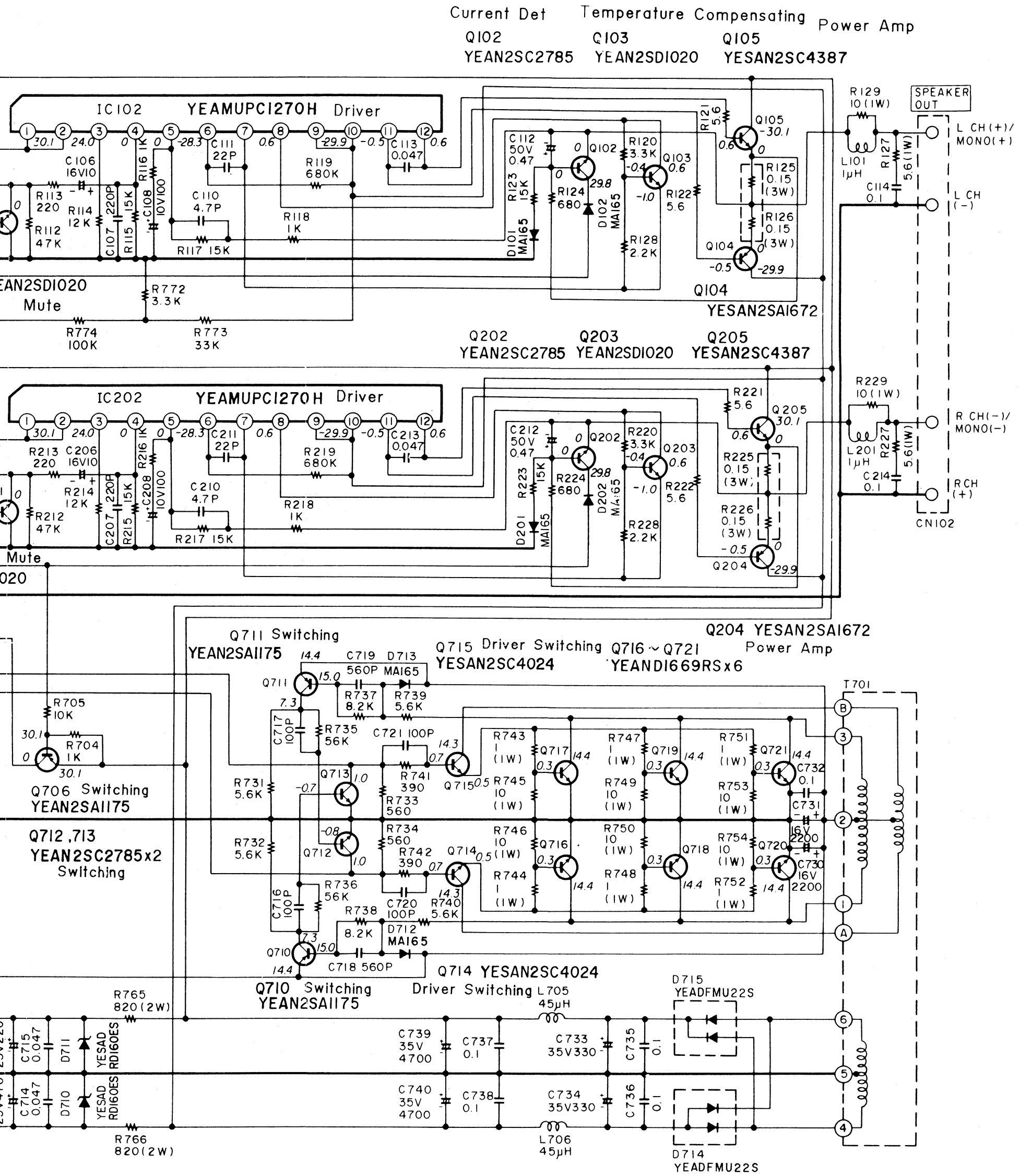
R L/MONO
INPUT

+ R −
OUT

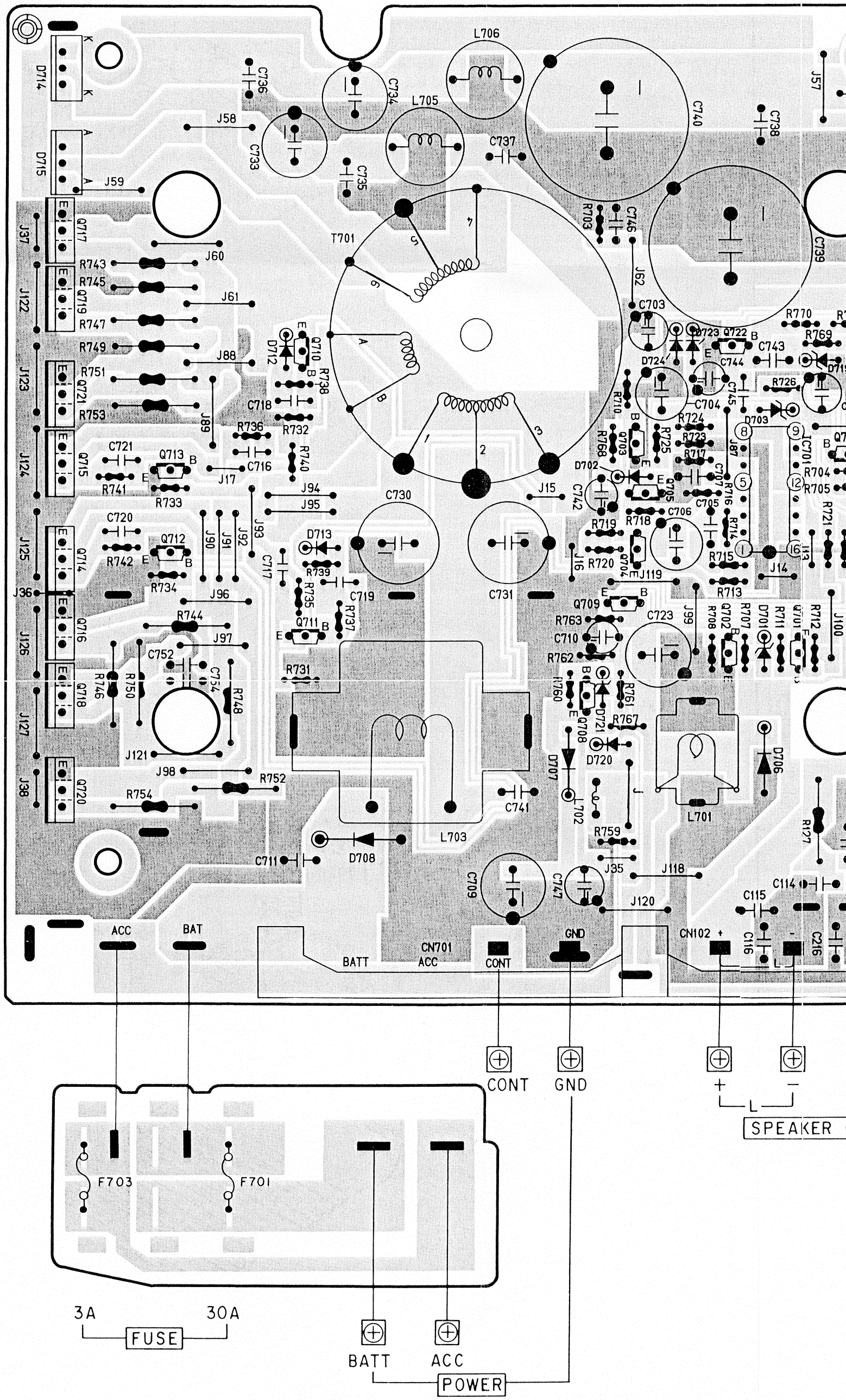
DIN101
1. Lch
2. Rch
3. ACC
4. GND(Lch)
5. GND(Rch)
6. ACC
7. CONT
8. MUTE

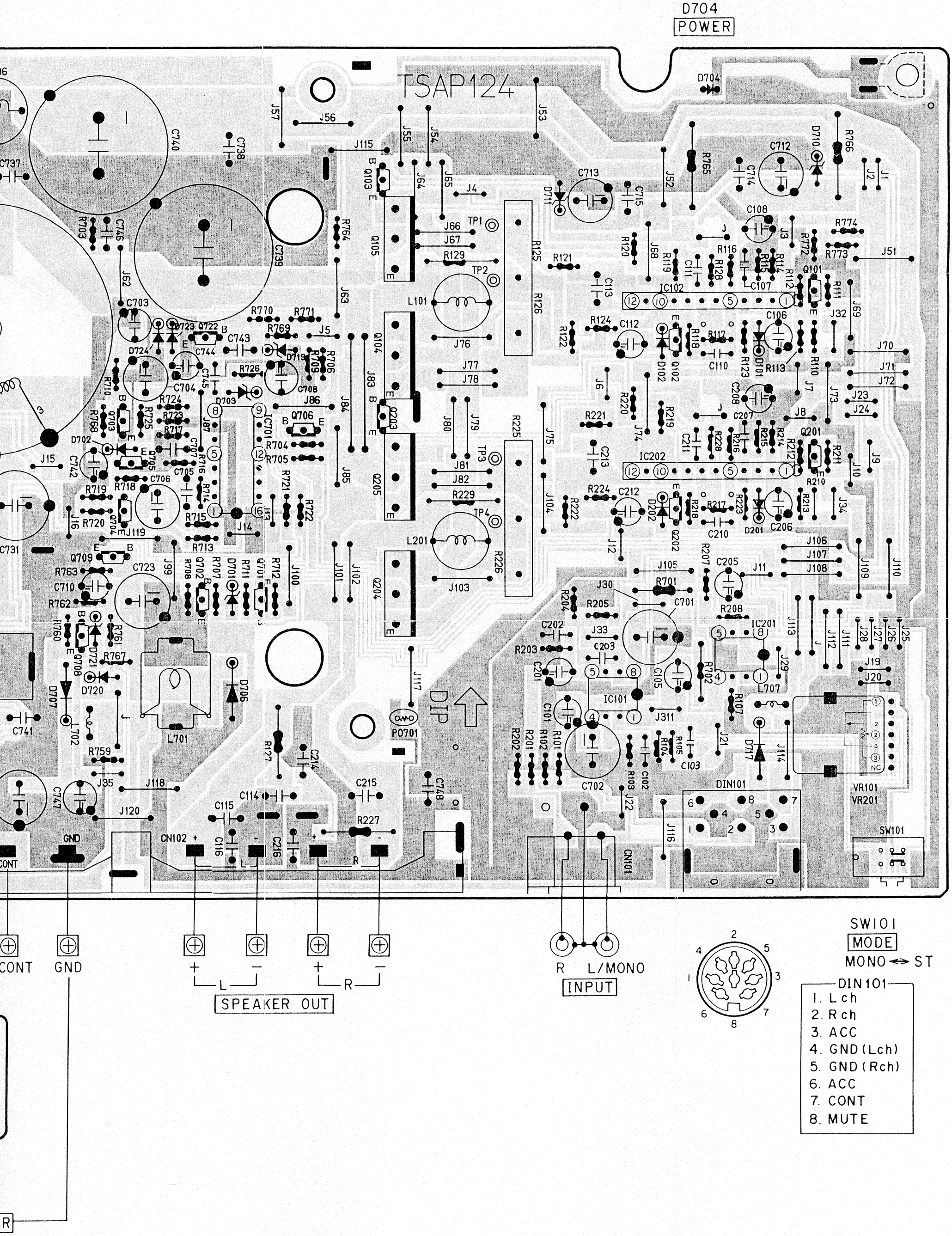

Amp/Buffer
IC101
YESAMM5218AP
IC201
YESAMM5218AP
CN101
L CH/ MONO
R CH
INPUT
DIN101 INPUT
R101 220
C101 16V10
R103 12K
C102 220P
R104 820
VR101 5KB
R105 330
C103 100P
IC101-1
1/2
C105 16V10
R701 100
IC201-1
R107 10K
MODE
MONO ↔ STEREO
SW101
L707 1.2mH
D717 MA165
C201 16V10
R201 220
R203 12K
C202 220P
R204 820
VR201 5KB
R205 330
C203 100P
IC101-2
2/2
C205 16V10
R207 10K
IC201-2
R702 100
R208 10K
C702 16V220
OSC Control
Q704 YEAN2SA1175
Q705 YEAN2SC2785
Q701 YEAN2SB810 Switching
Q703 OSC Control YEAN2SC2785
DC-DC Converter
IC701 YEAMUPC494C
R712 3.3K
R711 1K
R706 4.7K
R710 10K
R768 100
R707 8.2K
D701 YESADRD62ES
R708 2.2K
Q702
C703 16V10
R709 100K
D702 MA165
C742 16V100
C704 16V220
R713 3.3K
R714 100K
R715 68K
C705 0.1
C706 16V220
R716 10K
C707 0.001
R717 22K
R720 10K
Q704
R719 10K
R721 1K
R722 1K
R764 1K
C708 16V100
D703 YESAD RD220ES
R723 22K
Q705
R724 5.6K
R725 22K
R718 470K
R726 390
P0701
POWER D704 YESADSLP981A
Q702 Switching YEAN2SC2785
Q709 OSC Control YEAN2SA1175
POWER
BATT
ACC
CONT
GND
CN701
F703 3A
L701
L702 1.2mH
C723 16V1000
C747 16V100
D706 YEADDSF10E
D720 MA165
D721 YEADRD56JB3
R757 1.5K
R760 5.6K
Q708
C709 16V1000
D707 YEADDSF10E
C710 16V47
R761 100
R767 470
Q709
R762 10K
R763 10K
F701 30A
L703
D708 YEADU05B
C711 0.1
C741 0.047
R703 100
C746 0.1
Q708 YEAN2SA1175
ACC OFF Det
Mute Driver
Q722 YEAN2SC2785
C745 47P
R771 10K
C744 16V10
R770 2.2M
R769 330K
Q722
C743 0.1
D719 YESADRD9IES
D724 MA165
D723 MA165
DC-DC Converter


Current Det
Q102
YEAN2SC2785
Temperature C
Q103
YEAN2SD1020
mp/Buffer
IC201
YESAMM5218AP
218AP
IC102 YEAMUPC1270H Driver
R701 100
C105 16V10
IC201-1
R110 2.7K
C106 16V10
R116 1K
C111 22P
R119 680K
C112 50V 0.47
R120 3.3K
Q102
Q103
R123 15K
R124 680
D102 MA165
R122 5.6
R128 2.2K
D101 MA165
Q101
R113 220
R114 12K
C107 220P
R115 15K
C108 10V100
C110 4.7P
R118 1K
R111 2.2K
R112 47K
R117 15K
Q101 YEAN2SD1020
Mute
R772 3.3K
R774 100K
R773 33K
Q202
YEAN2SC2785
Q203
YEAN2SD1020
IC202 YEAMUPC1270H Driver
C205 16V10
IC201-2
R207 10K
R702 100
C702 16V220
R208 10K
R210 2.7K
R213 220
C206 16V10
R216 1K
C211 22P
R219 680K
C212 50V 0.47
R220 3.3K
Q202
Q203
R223 15K
R224 680
D202 MA165
R222 5.6
D201 MA165
Q201
R214 12K
C207 220P
R215 15K
C208 10V100
C210 4.7P
R218 1K
R211 2.2K
R212 47K
R217 15K
R228 2.2K
Q201 Mute
YEAN2SD1020
OSC Control
Q704
YEAN2SA1175
Q705
YEAN2SC2785
C Converter
R721 1K
R722 1K
R764 1K
UPC494C
D703 YESAD RD220ES
R723 22K
C708 16V100
D704 YESADSLP981A
R720 10K
Q705
R724 5.6K
R725 22K
R717 22K
Q704
R719 10K
R718 470K
R726 390
P0701
Q709 OSC Control
YEAN2SA1175
Q709
C16V47
F701 30A
L703
R762 10K
R763 10K
D708 YEADU05B
C711 0.1
C741 0.047
R703 100
C746 0.1
Q722
YEAN2SC2785
C745 47P
R771 10K
C744 16V10
MA165
R770 2.2M
R769 330K
C743 0.1
D724 MA165
D723
Q722
D719 YESADRD91ES
DC-DC Converter
R705 10K
R704 1K
Q706 Switching
YEAN2SA1175
Q712 ,713
YEAN2SC2785x2
Switching
Q711 Switching
YEAN2SA1175
Q715 Driver Switching Q716 ~ Q721
YESAN2SC4024
YEANDI669
C719 560P
D713 MA165
Q711
R737 8.2K
R739 5.6K
C717 100P
R735 56K
C721 100P
R731 5.6K
Q713
R741 390
R733 560
Q715
R743 1 (1W)
R745 10 (1W)
Q717
R747 1 (1W)
R749 10 (1W)
Q719
R732 5.6K
Q712
R734 560
R742 390
Q714
R746 10 (1W)
R744 1 (1W)
Q716
R750 10 (1W)
R748 1 (1W)
C716 100P
R736 56K
R738 8.2K
C720 100P
R740 5.6K
D712 MA165
Q710
C718 560P
Q710 Switching
YEAN2SA1175
Q714 YESAN2SC4024
Driver Switching
L705 45μH
R765 820(2W)
R766 820(2W)
C713 25V220
C715 0.047
D711
YESAD RD160ES
C712 25V470
C714 0.047
D710
YESAD RD160ES
C739 35V 4700
C737 0.1
C733 35V330
C735 0.1
C740 35V 4700
C738 0.1
C734 35V330
C736 0.1
L706 45μH
D715 YEAD
D714 YEAD



2 Channel Bridgeable Power Amplifier / 2-Kanal-Brückenleistungsverstärker


D714
D715
Q717
Q719
Q721
Q715
Q714
Q716
Q718
Q720
J37
J122
J123
J124
J125
J36
J126
J127
J38
R743
R745
R747
R749
R751
R753
R746
R750
R754
J59
J60
J61
J88
J89
J121
J98
R752
C736
C734
C733
C735
L706
L705
C737
C740
C738
J57
J58
T701
C721
Q713
R741
R733
C716
J17
R736
R732
R740
C718
Q710
R738
D712
C720
Q712
R742
R734
J90
J91
J92
J93
J94
J95
J96
J97
C752
C754
R748
C717
D713
R739
R735
R737
Q711
R744
R731
C730
C731
C719
J15
J16
J99
C723
C739
R703
C746
J62
C703
R770
R769
D723
Q722
C743
D724
C744
C745
C704
R726
R724
R723
R725
R717
C707
R716
J87
D703
R710
Q703
R768
D702
Q705
C742
R719
R718
C706
R714
C705
R715
J14
J119
R720
Q704
R713
Q709
R763
C710
R762
R760
Q708
R761
D721
R767
D720
D707
L702
J
R759
J35
J118
J120
C709
C747
L703
D708
C711
L701
D706
R127
C114
C115
C116
C216
J100
R712
R711
D701
Q702
R707
R708
Q701
J13
J12
J16
R721
R704
R705
IC701
J8
J9
J5
J4
ACC
BAT
BATT
ACC
CONT
GND
CN701
CN102
+
L
–
CONT
GND
+
–
L
SPEAKER
F703
F701
3A
30A
FUSE
BATT
ACC
POWER


TSAP124
D704
POWER
VR101,10
VOLUME
SW101
MODE
MONO ↔ ST
DIN101
1. L ch
2. R ch
3. ACC
4. GND (Lch)
5. GND (Rch)
6. ACC
7. CONT
8. MUTE
CONT
GND
SPEAKER OUT
INPUT
R
L/MONO
DIP
CN101
CN102
IC101
IC102
IC201
IC202
Q101
Q102
Q103
Q104
Q105
Q106
Q107
Q108
Q201
Q202
Q203
Q204
Q205
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
D101
D102
D201
D202
D701
D702
D703
D704
D706
D707
D710
D711
D717
D719
D720
D721
D723
D724
L101
L201
L701
L702
L707
P0701
TP1
TP2
TP3
TP4
VR101
VR201

D704
POWER

TSAP124

VR101,102
VOLUME

R L/MONO
INPUT

SW101
MODE
MONO ↔ ST

DIN101
1. Lch
2. Rch
3. ACC
4. GND(Lch)
5. GND(Rch)
6. ACC
7. CONT
8. MUTE

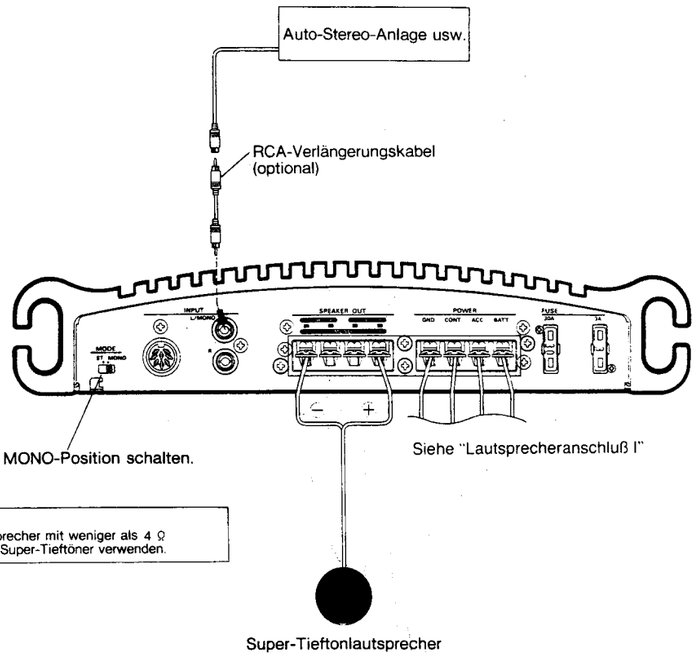
Verkabelungssatz

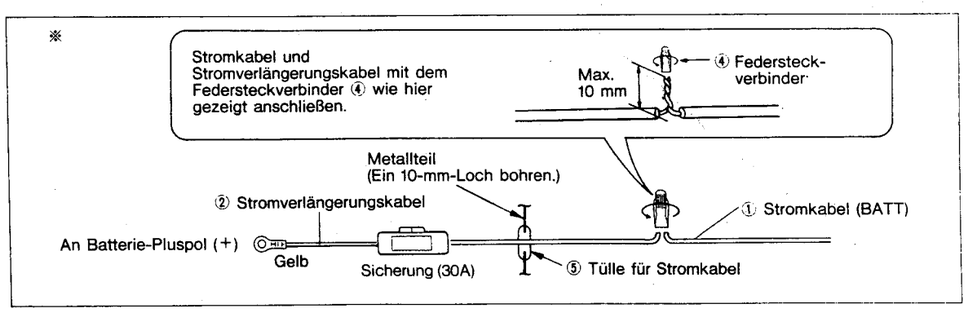
Nr.	Bezeichnung	Anzahl
①	Stromkabel (BATT) (Gelb)	1
②	Stromverlängerungskabel (5m) (Sicherung 30A) (CY-M1002EN) (Gelb) (2m) (Sicherung 20A (CY-M652EN)	1
③	Erdungsleitung (Schwarz)	1
④	Federsteckverbinder (Rot)	1

Nr.	Bezeichnung	Anzahl
⑤	Tülle für Stromkabel	1
⑥	Isoliedeckel	1
⑦	Flachrunddichtschraube (M3 × 8)	2

Lautsprecheranschluß II

Für Mono-Verstärker-System:



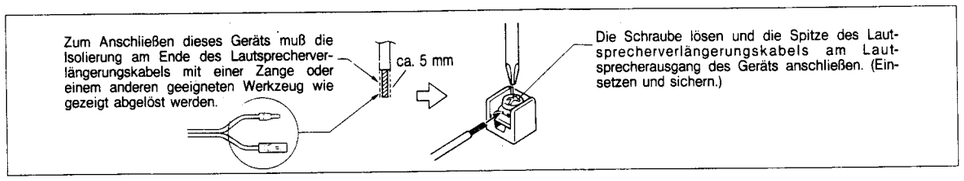


Grundlegende Gerätebedienung

Aus Gründen der Fahrsicherheit ist der Lautstärkepegel so einzustellen, daß auch andere Verkehrsgeräusche (Hupen usw.) vernommen werden können.

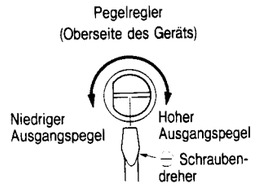
Vorsichtsmaßnahmen:

- Dieses Gerät ist für den Gebrauch zusammen mit einem Panasonic-Cassetten-/Radio-Gerät entwickelt und gebaut.
- Dieses Gerät wird automatisch ein- und ausgeschaltet, wenn das Cassetten-/Radio-Gerät ein- oder ausgeschaltet wird. Bei eingeschaltetem Cassetten-/Radiogerät leuchtet die Betriebsanzeige.
- Da dieses Gerät eine hohe Ausgangsleistung bietet, verbraucht es auch viel Strom: deshalb sollte es nicht bei abgestelltem Motor betrieben werden, da anderenfalls die Batterie schwach werden kann, was zu Anlaßproblemen führen könnte.
- Für den Gebrauch dieses Geräts muß das Lautsprecherverlängerungskabel (mit Lautsprecher mitgeliefert) wie in der Abbildung unten gezeigt behandelt werden.


Zum Anschließen dieses Geräts muß die Isolierung am Ende des Lautsprecherverlängerungskabels mit einer Zange oder einem anderen geeigneten Werkzeug wie gezeigt abgelöst werden.
ca. 5 mm
Die Schraube lösen und die Spitze des Lautsprecherverlängerungskabels am Lautsprecherausgang des Geräts anschließen. (Einsetzen und sichern.)

■ Pegeleinstellung:

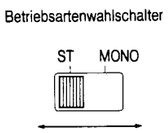
Es kann vorkommen, daß die Lautsprecherausgänge nicht richtig balanciert sind, je nach Typ der verwendeten Lautsprecher oder des jeweiligen Cassetten-/Radio-Geräts. In diesem Fall die Lautstärke durch Drehen des Pegelreglers nach links oder rechts einzustellen versuchen, bis die Lautsprecherausgänge ausbalanciert sind. Hierzu einen normalen Schraubendreher verwenden, wie in der Abbildung gezeigt. Die Auswirkungen der Einstellungen sind in der Tabelle unten beschrieben.
Zuerst wird der Pegel auf –3dB vom Maximalpegel eingestellt.



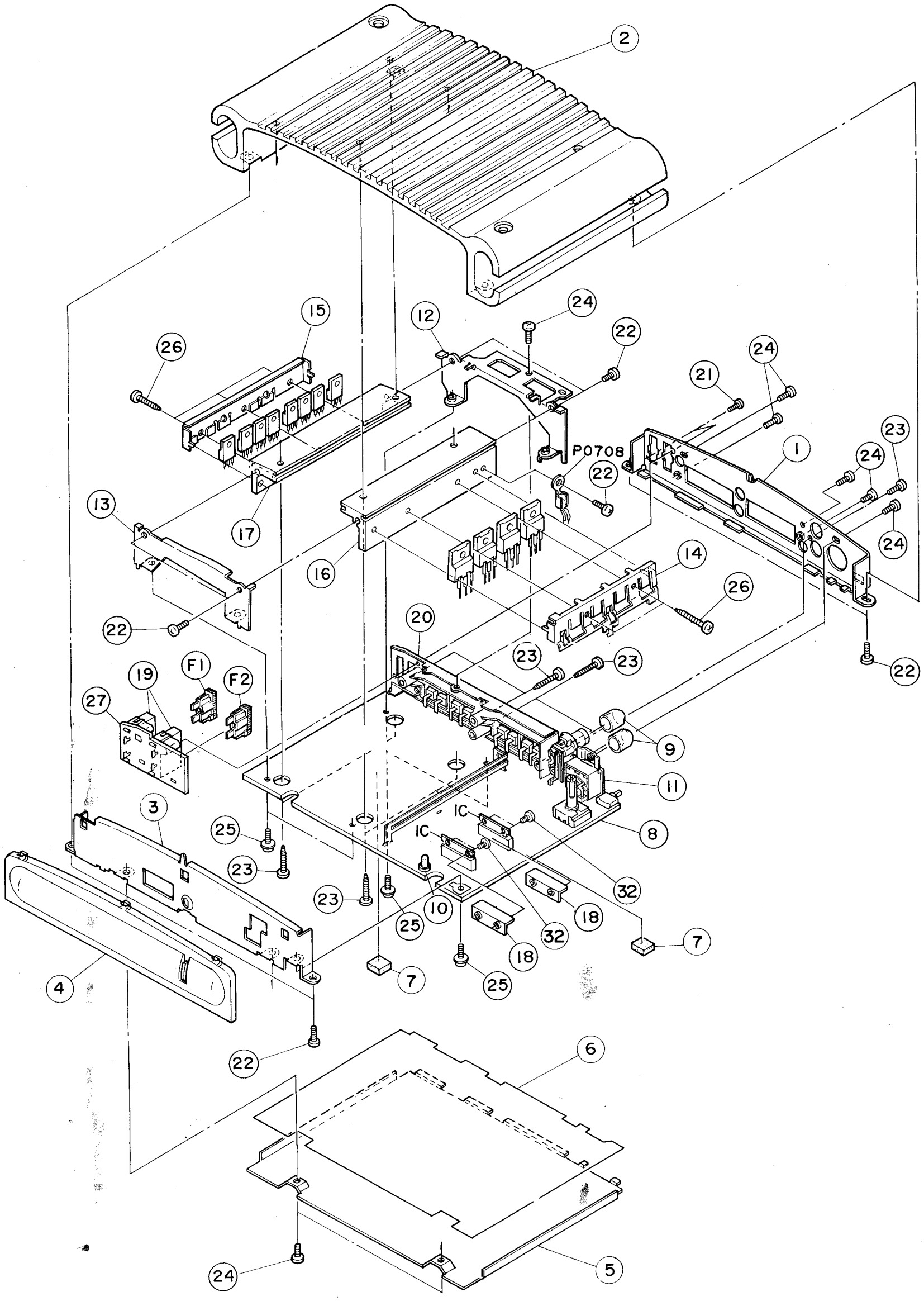
■ Betriebsartenwahl:

Dieser Betriebsartenwahlschalter besitzt zwei Positionen, die nachfolgend erläutert werden. Bezüglich Lautsprecheranschluß siehe Abbildungen unten.

Modell / Batterie	CY-M652EN-Ausgang	CY-M1002EN-Ausgang
MONO	130W	200W
ST	65W x 2	100W x 2



Vorsicht: Vor Betätigung des Betriebsartenwahlschalters und Anschluß des Lautsprecherkabels muß das Gerät ausgeschaltet sein.


2
15
12
24
22
26
21
24
23
P0708
22
1
24
24
13
17
16
14
26
22
20
23
23
22
19
F1
F2
27
9
11
3
IC
IC
8
25
23
32
23
25
10
18
32
7
18
4
7
25
22
6
24
5

Replacement Parts List
Model NO. CY-M652EN

NOTES :
1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice : Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Next to the Ref. No. in the parts list is a location key, to show the general location of the parts shown in the exploded drawing, as in a road map.
4. Main replacement parts are marked ○ in the remarks column.

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
			MISCELLANEOUS		
F1	YEAF01018		Fuse 3A (Plug in type)	1	
F2	YEAF01022		Fuse 20A (Plug in type)	1	
F3	YESAF01005		Fuse 20A	1	
CN101	YESAE123		RCA 2P Jack	1	
CN102	YESAT01013		Speaker Terminal	1	
CN701	YESAT01014		Power Terminal Base	1	
DIN101	YESAE121		DIN Connector	1	
1	YESFA08004		Back Plate	1	
2	YESFF01018		Heat Shink	1	
3	YESFA07001		Front Plate	1	
4	YESFC04008		Panel Assy	1	
5	YESFA05015		Under Cover	1	
6	YESFV01026		Insulator	1	
7	YESFS01059		Pad	2	
8	YESAP124		PCB w/Component	1	NLA
9	YESFR04005		RCA Cap	2	
10	YEFK04404		LED Holder	1	
11	YESFX021041		Mounting Braket for DIN	1	
12	YESFX021044		Mounting Bracket for PCB (A)	1	
13	YESFX021045		Mounting Bracket for PCB (B)	1	
14	YESFX021046		Bracket for Q	1	
15	YESFX021047		Bracket for Q	1	
16	YESFF01019		Heat Shink (A)	1	
17	YESFF01020		Heat Shink (B)	1	
18	YESFF01021		Heat Shink for IC	2	
19	YEFK02056		Fuse Holder	2	
20	YESFX021048		Mounting Bracket	1	
21	YESJT03021		Screw 2mmϕ×8mm (Black)	2	
22	YESJT03022		Screw 3mmϕ×6mm	13	
23	YEJS06027		Screw 3mmϕ×10mm	9	
24	YEJT03074		Screw 3mmϕ×6mm (Black)	6	
25	YEJT03073		Screw 3mmϕ×13mm	5	
26	YESJT03024		Screw 3mmϕ×12mm	5	
27	YESAP125		PCB w/Component (Main)	1	
			PRINTING		
	YEFM281786		Instruction Book	1	
	YEFM281819		Instruction Book	1	
			WIRING KIT		
1	YEAJ011178		Power Supply Cord (BAT)	1	
2	YEAJ02428		Power EXT, Cord w/Fuse 20A	1	
3	YEAJ09265		Ground Lead (Black)	1	
4	YBAE01051		Spring Connector	1	
5	YBFR01015		Grommet for Power Lead	1	
6	YEFA13924		Insulating Cover	1	
7	YESJT03026		Cup Tight Screw (M3×8)	2	
			SUPPLIED HARDWARES		
1	XTN5+60AFZ		Tapping Screw 5mmϕ×60mm (Black)	2	
2	XWE5E10FZ		Plan Washer (M5)	2	

MODEL CY-M652EN

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
			CAPACITORS		
C101	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C102	YEU05B221K		Ceramic, 220PF 50WV	1	
C103	YEU05B101K		Ceramic, 100PF 50WV	1	
C105	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C106	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C107	YEU05B221K		Ceramic, 220PF 50WV	1	
C108	ECEA1AU101		Electrolytic AL,100MFD 10WV	1	
C110	YEU05SL4R7K		Ceramic, 4.7PF 50WV	1	
C111	YEU05SL220J		Ceramic, 22PF 50WV	1	
C112	ECEA1HUR47		Electrolytic AL,0.47MFD 50WV	1	
C113	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C114	YESCC001		Ceramic, 0.1MFD 50WV	1	
C201	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C202	YEU05B221K		Ceramic, 220PF 50WV	1	
C203	YEU05B101K		Ceramic, 100PF 50WV	1	
C205	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C206	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C207	YEU05B221K		Ceramic, 220PF 50WV	1	
C208	ECEA1AU101		Electrolytic AL,100MFD 10WV	1	
C210	YEU05SL4R7K		Ceramic, 4.7PF 50WV	1	
C211	YEU05SL220J		Ceramic, 22PF 50WV	1	
C212	ECEA1HUR47		Electrolytic AL,0.47MFD 50WV	1	
C213	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C214	YESCC001		Ceramic, 0.1MFD 50WV	1	
C701	ECEA1CFS221		Electrolytic AL,220MFD 16WV	1	
C702	ECEA1CFS221		Electrolytic AL,220MFD 16WV	1	
C703	ECEA1HU100		Electrolytic AL,10MFD 50WV	1	
C704	ECEA1CU221		Electrolytic AL,220MFD 16WV	1	
C705	YESCC001		Ceramic, 0.1MFD 50WV	1	
C706	ECEA1CU221		Electrolytic AL,220MFD 16WV	1	
C707	YECQZ1H102K		Polyester, 0.001MFD 50WV	1	
C708	ECEA1CU101		Electrolytic AL,100MFD 16WV	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C709	ECEA1CU102		Electrolytic AL,1000MFD 16WV	1	
C710	ECEA1CU470		Electrolytic AL,47MFD 16WV	1	
C711	YESCC001		Ceramic, 0.1MFD 50WV	1	
C712	ECEA1EU471E		Electrolytic AL,470MFD 25WV	1	
C713	ECEA1EU221		Electrolytic AL,220MFD 25WV	1	
C714	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C715	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C716, 717	YEU05B101K		Ceramic, 100PF 50WV	2	
C718	YEU05B561K		Ceramic, 560PF 50WV	1	
C719	YEU05B561K		Ceramic, 560PF 50WV	1	
C720	YEU05B101K		Ceramic, 100PF 50WV	1	
C721	YEU05B101K		Ceramic, 100PF 50WV	1	
C723	ECEA1CU102		Electrolytic AL,1000MFD 16WV	1	
C731	ECUPF1C222M		Electrolytic AL,2200MFD 16WV	1	
C732	YESCC001		Ceramic, 0.1MFD 50WV	1	
C733	ECUPF1V331M		Electrolytic AL,330MFD 35WV	1	
C734	ECUPF1V331M		Electrolytic AL,330MFD 35WV	1	
C735	YESCC001		Ceramic, 0.1MFD 50WV	1	
C736	YESCC001		Ceramic, 0.1MFD 50WV	1	
C737	YESCC001		Ceramic, 0.1MFD 50WV	1	
C738	YESCC001		Ceramic, 0.1MFD 50WV	1	
C739	ECLGQ1V332M		Electrolytic AL,3300MFD 35WV	1	
C740	ECLGQ1V332M		Electrolytic AL,3300MFD 35WV	1	
C742	ECEA1CU101		Electrolytic AL,100MFD 16WV	1	
C743	YESCC001		Ceramic, 0.1MFD 50WV	1	
C744	ECEA1CU100		Electrolytic AL,10MFD 16WV	1	
C745	YEU05SL470J		Ceramic, 47PF 50WV	1	
C746	YESCC001		Ceramic, 0.1MFD 50WV	1	
C747	ECEA1CU101		Electrolytic AL,100MFD 16WV	1	

MODEL CY-M652EN

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
			RESISTORS		
R101	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R103	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R104	ERD25TJ821		Carbon, 820 ohms 0.25W	1	
R105	ERD25TJ331		Carbon, 330 ohms 0.25W	1	
R107	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R110	ERD25TJ272		Carbon, 2.7k ohms 0.25W	1	
R111	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R112	ERD25TJ473		Carbon, 47k ohms 0.25W	1	
R113	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R114	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R115	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R116	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R117	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R118	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R119	ERD25TJ684		Carbon, 680k ohms 0.25W	1	
R120	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R121	ERD25TJ5R6		Carbon, 5.6 ohms 0.25W	1	
R122	ERD25TJ5R6		Carbon, 5.6 ohms 0.25W	1	
R123	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R124	ERD25TJ681		Carbon, 680 ohms 0.25W	1	
R125	ERGC33TR15K		Carbon, 0.15 ohms 3W	1	
R127	ERS01MJ5R6		Carbon, 5.6 ohms 1W	1	
R128	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R129	ERS01HJ100		Carbon, 10 ohms 1W	1	
R201	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R203	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R204	ERD25TJ821		Carbon, 820 ohms 0.25W	1	
R205	ERD25TJ331		Carbon, 330 ohms 0.25W	1	
R207	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R208	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R210	ERD25TJ272		Carbon, 2.7k ohms 0.25W	1	
R211	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R212	ERD25TJ473		Carbon, 47k ohms 0.25W	1	
R213	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R214	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R215	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R216	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R217	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R218	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R219	ERD25TJ684		Carbon, 680k ohms 0.25W	1	
R220	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R221	ERD25TJ5R6		Carbon, 5.6 ohms 0.25W	1	
R222	ERD25TJ5R6		Carbon, 5.6 ohms 0.25W	1	
R223	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R224	ERD25TJ681		Carbon, 680 ohms 0.25W	1	
R225	ERGC33TR15K		Carbon, 0.15 ohms 3W	1	
R227	ERS01MJ5R6		Carbon, 5.6 ohms 1W	1	
R228	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R229	ERS01HJ100		Carbon, 10 ohms 1W	1	
R701	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R702	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R703	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R704	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R705	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R706	ERD25TJ472		Carbon, 4.7k ohms 0.25W	1	
R707	ERD25TJ822		Carbon, 8.2k ohms 0.25W	1	
R708	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R709	ERD25TJ104		Carbon, 100k ohms 0.25W	1	
R710	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R711	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R712	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R713	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R714	ERD25TJ104		Carbon, 100k ohms 0.25W	1	
R715	ERD25TJ683		Carbon, 68k ohms 0.25W	1	
R716	ERD25TJ223		Carbon, 22k ohms 0.25W	1	
R717	ERD25TJ183		Carbon, 18k ohms 0.25W	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R718	ERD25TJ474		Carbon, 470k ohms 0.25W	1	
R719	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R720	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R721	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R722	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R723	ERD25TJ223		Carbon, 22k ohms 0.25W	1	
R724	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R725	ERD25TJ223		Carbon, 22k ohms 0.25W	1	
R726	ERD25TJ561		Carbon, 560 ohms 0.25W	1	
R731	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R732	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R733	ERD25TJ561		Carbon, 560 ohms 0.25W	1	
R734	ERD25TJ561		Carbon, 560 ohms 0.25W	1	
R735	ERD25TJ563		Carbon, 56k ohms 0.25W	1	
R736	ERD25TJ563		Carbon, 56k ohms 0.25W	1	
R737	ERD25TJ822		Carbon, 8.2k ohms 0.25W	1	
R738	ERD25TJ822		Carbon, 8.2k ohms 0.25W	1	
R739	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R740	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R741	ERD25TJ391		Carbon, 390 ohms 0.25W	1	
R742	ERD25TJ391		Carbon, 390 ohms 0.25W	1	
R743	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R744	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R745	ERS01HJ100		Carbon, 10 ohms 1W	1	
R746	ERS01HJ100		Carbon, 10 ohms 1W	1	
R747	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R748	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R749	ERS01HJ100		Carbon, 10 ohms 1W	1	
R750	ERS01HJ100		Carbon, 10 ohms 1W	1	
R759	ERD25TJ152		Carbon, 1.5k ohms 0.25W	1	
R760	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R761	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R762	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R763	ERD25TJ103		Carbon, 10k ohms 0.25W	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R764	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R765	ERS01HJ391		Carbon, 390 ohms 1W	1	
R766	ERS01HJ391		Carbon, 390 ohms 1W	1	
R767	ERD25TJ471		Carbon, 470 ohms 0.25W	1	
R768	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R769	ERD25TJ334		Carbon, 330k ohms 0.25W	1	
R770	ERD25TJ225		Carbon, 2.2M ohms 0.25W	1	
R771	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R772	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R773	ERD25TJ333		Carbon, 33k ohms 0.25W	1	
R774	ERD25TJ104		Carbon, 100k ohms 0.25W	1	
R775	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
SWITCHES					
SW101	YESAS080		SW	1	
VARIABLE RESISTORS					
VR101	YESVR032		Volume Control	1	
COILS & TRANSFORMERS					
L101	YELQ12N055		1uH RF Coil	1	
L201	YELQ12N055		1uH RF Coil	1	
L701	YETQ020F054A		Choke Coil	1	
L702	YELQ05N056		Choke Coil	1	
L703	YETQ030F088		Choke Coil	1	
L705	YEAY027		45uH Coil	1	
L706	YEAY027		45uH Coil	1	
L707	YELQ05N056		Choke Coil	1	
T701	YESAY01025		Transformer	1	
POSISTOR					
P0701	YESAQ02002			1	

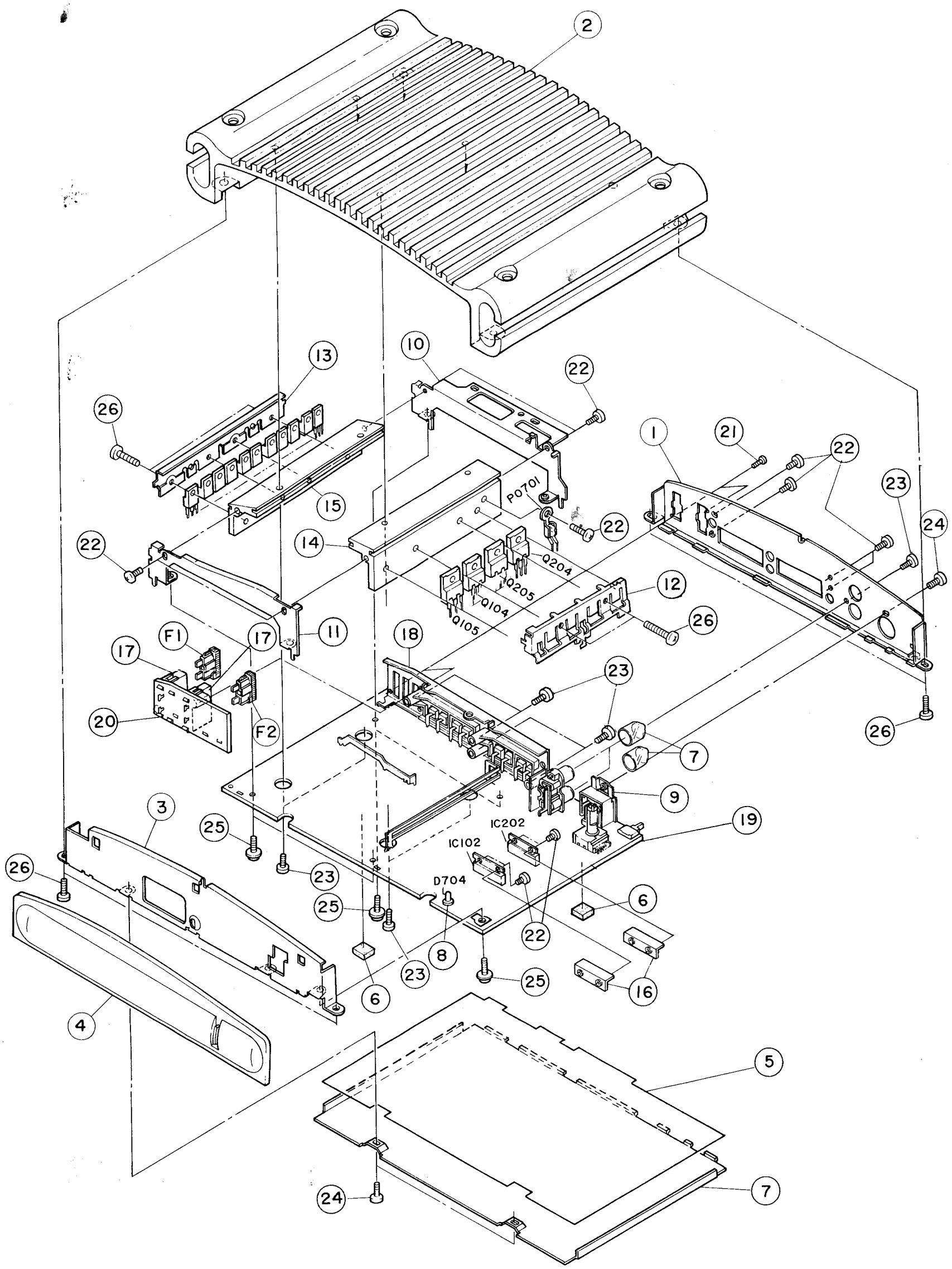
Replacement Parts List
Model NO. CY-M1002EN

NOTES :
1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice : Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Next to the Ref. No. in the parts list is a location key, to show the general location of the parts shown in the exploded drawing, as in a road map.
4. Printed circuit board assembly with mark (NLA) is no longer available after production discontinuation of the complete set.

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
			MISCELLANEOUS		
F1	YEAF01018		Fuse 3A (Plug in type)	1	
F2	YESAF01004		Fuse 30A (Plug in type)	1	
F3	YESAF01006		Fuse 30A	1	
CN101	YESAE123		RCA 2P Jack	1	
CN102	YESAT01013		4P Terminal	1	
CN701	YESAT01014		4P Terminal	1	
DIN101	YESAE121		8P DIN Connector	1	
1	YESFA08006		Back Plate	1	
2	YESFF01025		Heat Shink	1	
3	YESFA07002		Front Plate	1	
4	YESFC04010		Panel Assy	1	
5	YESFV01030		Insulator	1	
6	YESFS01059		Pad	2	
7	YESFR04005		RCA Cap	4	
8	YEFK04404		LED Holder	1	
9	YESFX021041		Mounting Bracket for DIN	1	
10	YESF021055		Mounting Bracket for PCB (A)	1	
11	YESFX021056		Mounting Bracket for PCB (B)	1	
12	YESFX021046		Mounting Bracket for TR (A)	1	
13	YESFX021057		Mounting Bracket for TR (B)	1	
14	YESFF01026		Heat Shink (A)	1	
15	YESFF01027		Heat Shink (B)	1	
16	YESFF01021		Heat Shink for IC	1	
17	YEFK02056		Fuse Holder	2	
18	YESFX021054		Mounting Bracket	1	
19	YESAP134		PCB w/Conponent	1	NLA
20	YESAP133		PCB w/Conponent	1	NLA
21	YESJT03021		Screw 2mmϕ×8mm (Black)	2	
22	YESJT03022		Screw 3mmϕ×6mm	13	
23	YEJS06027		Screw 3mmϕ×10mm (Black)	9	
24	YEJT03074		Screw 3mmϕ×6mm (Black)	6	
25	YEJT03073		Screw 3mmϕ×6mm	5	
26	YESJT03024		Screw 3mmϕ×12mm	6	
27	YESFA05017		Under Cover	1	
			WIRING KIT		
1	YEAJ011178		Power Cord (Batt)	1	
2	YEAJ02557		Power EXT, Cord w/Fuse 30A	1	
3	YEAJ09265		Ground Lead	1	
4	YBAE01051		Spring Connector	1	
5	YBFR01015		Grommet for Power Cord	1	
6	YEFA13924		Insulating Cover	1	
7	YESJT03026		Cup Tight Screw (M3×8)	2	
			PRINTING		
	YEFM281786		Instruction Book	1	
	YEFM281819		Instruction Book	1	
			SUPPLIED HARDWARES		
	XTN5+65AFZ		Screw 5mmϕ×65mm	4	
	XWE5E10FZ			4	

EXPLODED VIEW/AUFGELÖTE DARSTELLUNGS — MODEL CY-M1002EN

■ Numbers in ○ are indicated REF. No. in the REPLACEMENT PARTS LIST.



2 Channel Bridgeable Power Amplifier / 2-Kanal-Brückenleistungsverstärker

MODEL CY-M1002EN

ICs & TRANSISTORS

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
IC101	YESAMM5218AP		IC	1	
IC102	YEAMUPC1270H		IC	1	
IC201	YESAMM5218AP		IC	1	
IC202	YEAMUPC1270H		IC	1	
IC701	YEAMUPC494C		IC	1	
Q101	YEAN2SD1020		Transistor	1	
Q102	YEAN2SC2785		Transistor	1	
Q103	YEAN2SD1020		Transistor	1	
Q104	YESAN2SA1672		Transistor	1	
Q105	YESAN2SC4387		Transistor	1	
Q201	YEAN2SD1020		Transistor	1	
Q202	YEAN2SC2785		Transistor	1	
Q203	YEAN2SD1020		Transistor	1	
Q204	YESAN2SA1672		Transistor	1	
Q205	YESAN2SC4387		Transistor	1	
Q701	YEAN2SB810		Transistor	1	
Q702	YEAN2SC2785		Transistor	1	
Q703	YEAN2SC2785		Transistor	1	
Q704	YEAN2SA1175		Transistor	1	
Q705	YEAN2SC2785		Transistor	1	
Q706	YEAN2SA1175		Transistor	1	
Q708	YEAN2SA1175		Transistor	1	
Q709	YEAN2SA1175		Transistor	1	
Q710	YEAN2SA1175		Transistor	1	
Q711	YEAN2SA1175		Transistor	1	
Q712	YEAN2SC2785		Transistor	1	
Q713	YEAN2SC2785		Transistor	1	
Q714	YESAN2SC4024		Transistor	1	
Q715	YESAN2SC4024		Transistor	1	
Q716	YEAND1669RS		Transistor	1	
Q717	YEAND1669RS		Transistor	1	
Q718	YEAND1669RS		Transistor	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
Q719	YEAND1669RS		Trasistor	1	
Q720	YEAND1669RS		Trasistor	1	
Q721	YEAND1669RS		Trasistor	1	
Q722	YEAN2SC2785		Trasistor	1	

DIODES

D101	MA165		Diode	1	
D102	MA165		Diode	1	
D201	MA165		Diode	1	
D202	MA165		Diode	1	
D701	YESADRD62ES		Diode	1	
D702	MA165		Diode	1	
D703	YESADRD220ES		Diode	1	
D704	YESADSLP981A		Diode	1	
D706	YEADDSF10E		Diode	1	
D707	YEADDSF10E		Diode	1	
D708	YEADU05B		Diode	1	
D710	YESADRD160ES		Diode	1	
D711	YESADRD160ES		Diode	1	
D712	MA165		Diode	1	
D713	MA165		Diode	1	
D714	YEADFMU22R		Diode	1	
D715	YEADFMU22S		Diode	1	
D717	MA165		Diode	1	
D719	YESADRD91ES		Diode	1	
D720	MA165		Diode	1	
D721	YEADRD56JB3		Diode	1	
D723	MA165		Diode	1	
D724	MA165		Diode	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C709	ECEA1CU102		Electrolytic AL,1000MFD 16WV	1	
C710	ECEA1CU470		Electrolytic AL,47MFD 16WV	1	
C711	YESCC001		Ceramic, 0.1MFD 50WV	1	
C712	ECEA1EU471		Electrolytic AL,470MFD 25WV	1	
C713	ECEA1EU221		Electrolytic AL,220MFD 25WV	1	
C714	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C715	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C716	YEU05B101K		Ceramic, 100PF 50WV	1	
C717	YEU05B101K		Ceramic, 100PF 50WV	1	
C718	YEU05B661K		Ceramic, 560PF 50WV	1	
C719	YEU05B561K		Ceramic, 560PF 50WV	1	
C720	YEU05B101K		Ceramic, 100PF 50WV	1	
C721	YEU05B101K		Ceramic, 100PF 50WV	1	
C723	ECEA1CU102		Electrolytic AL,1000MFD 16WV	1	
C730	ECUPF1C222M		Electrolytic AL,2200MFD 16WV	1	
C731	ECUPF1C222M		Electrolytic AL,2200MFD 16WV	1	
C732	YESCC001		Ceramic, 0.1MFD 50WV	1	
C733	ECUPF1V331M		Electrolytic AL,330MFD 35WV	1	
C734	ECUPF1V331M		Electrolytic AL,330MFD 35WV	1	
C735	YESCC001		Ceramic, 0.1MFD 50WV	1	
C736	YESCC001		Ceramic, 0.1MFD 50WV	1	
C737	YESCC001		Ceramic, 0.1MFD 50WV	1	
C738	YESCC001		Ceramic, 0.1MFD 50WV	1	
C739	ECLGQ1V472M		Electrolytic AL,4700MFD 35WV	1	
C740	ECLGQ1V472M		Electrolytic AL,4700MFD 35WV	1	
C742	ECEA1CU101		Electrolytic AL,100MFD 16WV	1	
C743	YESCC001		Ceramic, 0.1MFD 50WV	1	
C744	ECEA1CU100		Electrolytic AL,10MFD 16WV	1	
C745	YEU05SL470J		Ceramic, 47PF 50WV	1	
C746	YECCD1H561K		Ceramic, 560PF 50WV	1	
C747	ECEA1CU101		Electrolytic AL,100MFD 16WV	1	

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CAPACITORS

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
C101	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C102	YEU05B221K		Ceramic, 220PF 50WV	1	
C103	YEU05B101K		Ceramic, 100PF 50WV	1	
C105	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C106	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C107	YEU5B221K		Ceramic, 220PF 50WV	1	
C108	ECEA1AU101		Electrolytic AL,100MFD 10WV	1	
C110	YEU05SL4R7K		Ceramic, 4.7MFD 50WV	1	
C111	YEU05SL220J		Ceramic, 22PF 50WV	1	
C112	ECEA1HUR47		Electrolytic AL,0.47MFD 50WV	1	
C113	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C114	YESCC001		Ceramic, 0.1MFD 50WV	1	
C201	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C202	YEU05B221K		Ceramic, 220PF 50WV	1	
C203	YEU05B101K		Ceramic, 100PF 50WV	1	
C205	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C206	ECEA1CFS100		Electrolytic AL,10MFD 16WV	1	
C207	YEU05B221K		Ceramic, 220PF 50WV	1	
C208	ECEA1AU101		Electrolytic AL,100MFD 10WV	1	
C210	YEU05SL4R7K		Ceramic, 4.7MFD 50WV	1	
C211	YEU05SL220J		Ceramic, 22PF 50WV	1	
C212	ECEA1HUR47		Electrolytic AL,0.47MFD 50WV	1	
C213	YECQZ1H473K		Polyester, 0.047MFD 50WV	1	
C214	YESCC001		Ceramic, 0.1MFD 50WV	1	
C701	ECEA1CFS221		Electrolytic AL,220MFD 16WV	1	
C702	ECEA1CFS221		Electrolytic AL,220MFD 16WV	1	
C703	ECEA1HU100		Electrolytic AL,10MFD 50WV	1	
C704	ECEA1CU221		Electrolytic AL,220MFD 16WV	1	
C705	YESCC001		Ceramic, 0.1MFD 50WV	1	
C706	ECEA1CU221		Electrolytic AL,220MFD 16WV	1	
C707	YECQZ1H102K		Polyester, 0.001MFD 50WV	1	
C708	ECEA1CU101		Electrolytic AL,100MFD 16WV	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
			RESISTORS		
R101	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R103	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R104	ERD25TJ821		Carbon, 820 ohms 0.25W	1	
R105	ERD25TJ331		Carbon, 330 ohms 0.25W	1	
R107	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R110	ERD25TJ272		Carbon, 2.7k ohms 0.25W	1	
R111	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R112	ERD25TJ473		Carbon, 47k ohms 0.25W	1	
R113	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R114	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R115	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R116	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R117	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R118	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R119	ERD25TJ684		Carbon, 680k ohms 0.25W	1	
R120	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R121	ERD25TJ5R6		Carbon, 5.6 ohms 0.25W	1	
R122	ERD25TJ5R6		Carbon, 5.6 ohms 0.25W	1	
R123	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R124	ERD25TJ681		Carbon, 680 ohms 0.25W	1	
R125	ERGC33TR15K		Carbon, 0.15 ohms 3W	1	
R127	ERS01MJ5R6		Carbon, 5.6 ohms 1W	1	
R128	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R129	ERS01HJ100		Carbon, 10 ohms 1W	1	
R201	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R203	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R204	ERD25TJ821		Carbon, 820 ohms 0.25W	1	
R205	ERD25TJ331		Carbon, 330 ohms 0.25W	1	
R207	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R208	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R210	ERD25TJ272		Carbon, 2.7k ohms 0.25W	1	
R211	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R212	ERD25TJ473		Carbon, 47k ohms 0.25W	1	
R213	ERD25TJ221		Carbon, 220 ohms 0.25W	1	
R214	ERD25TJ123		Carbon, 12k ohms 0.25W	1	
R215	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R216	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R217	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R218	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R219	ERD25TJ684		Carbon, 680k ohms 0.25W	1	
R220	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R221	ERD25TJ5R6		Carbon, 5.6k ohms 0.25W	1	
R222	ERD25TJ5R6		Carbon, 5.6k ohms 0.25W	1	
R223	ERD25TJ153		Carbon, 15k ohms 0.25W	1	
R224	ERD25TJ681		Carbon, 680 ohms 0.25W	1	
R225	ERGC33TR15K		Carbon, 0.15 ohms 3W	1	
R227	ERS01MJ5R6		Carbon, 5.6 ohms 1W	1	
R228	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R229	ERS01HJ100		Carbon, 10 ohms 1W	1	
R701	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R702	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R703	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R704	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R705	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R706	ERD25TJ472		Carbon, 4.7k ohms 0.25W	1	
R707	ERD25TJ822		Carbon, 8.2k ohms 0.25W	1	
R708	ERD25TJ222		Carbon, 2.2k ohms 0.25W	1	
R709	ERD25TJ104		Carbon, 100k ohms 0.25W	1	
R710	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R711	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R712	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R713	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R714	ERD25TJ104		Carbon, 100k ohms 0.25W	1	
R715	ERD25TJ683		Carbon, 68k ohms 0.25W	1	
R716	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R717	ERD25TJ223		Carbon, 22k ohms 0.25W	1	

Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R718	ERD25TJ474		Carbon, 470k ohms 0.25W	1	
R719	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R720	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R721	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R722	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R723	ERD25TJ223		Carbon, 22k ohms 0.25W	1	
R724	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R725	ERD25TJ223		Carbon, 22k ohms 0.25W	1	
R726	ERD25TJ561		Carbon, 560 ohms 0.25W	1	
R731	ERD25TJ562		Carbon, 5.6 ohms 0.25W	1	
R732	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R733	ERD25TJ561		Carbon, 560 ohms 0.25W	1	
R734	ERD25TJ561		Carbon, 560 ohms 0.25W	1	
R735	ERD25TJ563		Carbon, 56k ohms 0.25W	1	
R736	ERD25TJ563		Carbon, 56k ohms 0.25W	1	
R737	ERD25TJ822		Carbon, 8.2k ohms 0.25W	1	
R738	ERD25TJ822		Carbon, 8.2k ohms 0.25W	1	
R739	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R740	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R741	ERD25TJ391		Carbon, 390 ohms 0.25W	1	
R742	ERD25TJ391		Carbon, 390 ohms 0.25W	1	
R743	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R744	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R745	ERS01HJ100		Carbon, 10 ohms 1W	1	
R746	ERS01HJ100		Carbon, 10 ohms 1W	1	
R747	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R748	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R749	ERS01HJ100		Carbon, 10 ohms 1W	1	
R750	ERS01HJ100		Carbon, 10 ohms 1W	1	
R751	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R752	ERS01HJ1R0		Carbon, 1 ohm 1W	1	
R753	ERS01HJ100		Carbon, 10 ohms 1W	1	
R754	ERS01HJ100		Carbon, 10 ohms 1W	1	
R759	ERD25TJ152		Carbon, 1.5k ohms 0.25W	1	

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Ref. No.	Part No.	Part Code	Part Name & Description	Pcs set	Remarks
R760	ERD25TJ562		Carbon, 5.6k ohms 0.25W	1	
R761	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R762	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R763	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R764	ERD25TJ102		Carbon, 1k ohms 0.25W	1	
R765	ERS02HJ821		Carbon, 820 ohms 2W	1	
R766	ERS02HJ821		Carbon, 820 ohms 2W	1	
R767	ERD25TJ471		Carbon, 470 ohms 0.25W	1	
R768	ERD25TJ101		Carbon, 100 ohms 0.25W	1	
R769	ERD25TJ334		Carbon, 330k ohms 0.25W	1	
R770	ERD25TJ225		Carbon, 22M ohms 0.25W	1	
R771	ERD25TJ103		Carbon, 10k ohms 0.25W	1	
R772	ERD25TJ332		Carbon, 3.3k ohms 0.25W	1	
R773	ERD25TJ333		Carbon, 33k ohms 0.25W	1	
R774	ERD25TJ104		Carbon, 100k ohms 0.25W	1	
			SWITCHE		
SW101	YESAS080		Selector Switch MONO/STEREO	1	
			VOLUME CONTROLS		
VR101	YESVR032		5k ohms	1	
VR201	YESVR032		5k ohms	1	
			COILS & TRANSISTORS		
T701	YESAY01026		Transformer	1	
J12	YELQ05N056		Choke Coil	1	
L101	YELQ12N055		1µH RF Coil	1	
L201	YELQ12N055		1µH RF Coil	1	
L701	YETQ020F054A		Choke Coil	1	
L702	YELQ05N056		Choke Coil	1	
L703	YETQ030F101		Choke Coil	1	
L705	YESAY027		45µH Coil	1	
L706	YESAY027		45µH Coil	1	
			POSISTOR		
P0701	YESAQ02002		Posistor	1	

ORDER NO. ACED9511015

Parts Change Notice

Model No. CY-M652EU/EC/EN

Please revise the original parts list in the Service Manual to conform to the change(s) shown herein. If new part numbers are shown, be sure to use them when ordering parts.

Reason for Change	*The circled item indicates the reason. If no marking, see the Notes in the bottom column.
1. Improve performance	Correction
2. Change of material or dimension	
3. To meet approved specification	
4. Standardization	
5. Addition	
6. Deletion	
⑦ Correction	
8. Other	

Interchangeability Code	**The circled item indicates the interchangeability. If no marking, see the Notes in the bottom column.	
	Parts / Set Production	
A	Original → Early New → Late	Original or new parts may be used in early or late production set. Use original parts until exhausted, then stock new parts.
Ⓑ	Original → Early New → Late	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.
C	Original → Early New → Late	New parts only may be used in early or late production sets. Stock new parts.
D	Original → Early New → Late	Original parts may be used in early production sets only. New parts may be used in late production sets only. Stock both original and new parts.
E	Other	

Part Number

Model No.	Ref. No.	Original Parts No.	New Part No.	Notes(∗-∗∗)	Part Name & Descriptions	
CY-M652EU	Q205	YEAN2SC4386	YESAN2SC4386	7-C	Transistor	
CY-M652EC						
CY-M652EN						

File this Parts Change Notice with your copy of the Service Manual.

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